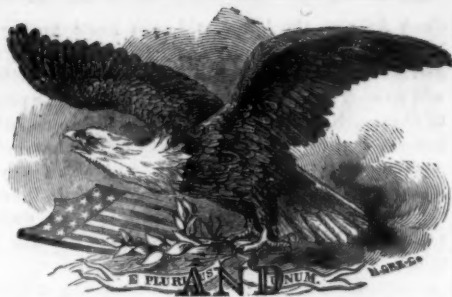


ARMY



NAVY

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CONTENTS OF NUMBER FIFTY-ONE.

American Ideas in European Warfare.....	797	The Navy Bill.....	801
The Army.....	798	Explosive Bullets.....	803
Abstract of Special Orders issued from the Adjutant-General's Office for the week ending August 1, 1870.....	798	Retired Pay—Each and Every.....	808
Army Personal.....	799	The Assassination of Lieutenant-Colonel Buel.....	803
Courts-Martial.....	799	Private Property at Sea.....	803
The Navy.....	799	Editorial Paragraphs.....	804
Various Naval Matters.....	799	The European Crisis.....	806
Navy Gazette.....	800	The Remington Gun in Cuba.....	806
Obituary.....	800	Solar Heat.....	806
		Sea-Sickness.....	807
		The National Guard.....	808

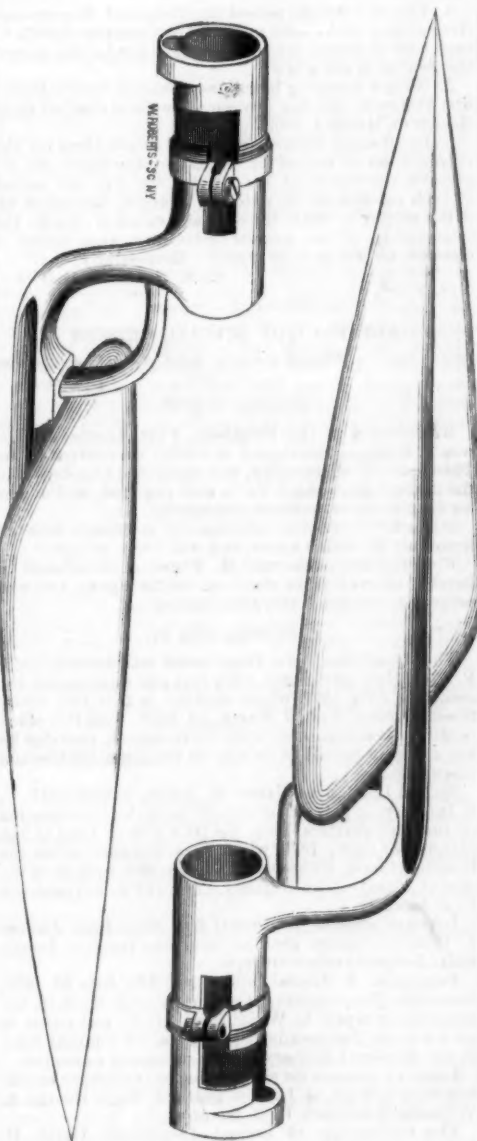
We have in preparation a map of the present theatre of military operations on the Rhine, which we shall publish next week. It has been prepared with great care, with the help of the best French and Prussian military maps, and will be found accurate, and as complete as a newspaper map can well be made.

AMERICAN IDEAS IN EUROPEAN WARFARE.

THE contest between France and Prussia promises to develop not a few of the suggestions of recent experience on this side the Atlantic. The extraordinary character of our civil war, and the stimulus it gave to American ingenuity in the direction of warlike invention, resulted in expedients and tactical changes that have been matters of study with European authorities, and are likely to retain their places in the ritual of war. The torpedo asserted itself by demonstrations unquestionable; half a dozen new kinds of shell added their shrieks to the artillery chorus; aerial reconnaissance enjoyed its first exhaustive trial; the telegraph was established and elaborated as a means of communication between headquarters and moving corps; the improvising of bridges came to be an engineering amusement, and the construction of iron ways was reduced to a system. The nature of the immense and varied terrain, moreover, inspired and demonstrated new theories, offensive and defensive, of army movement. Indeed, it may be safely said that both the Union and Rebel campaigns—for the South was only less prolific than the North in original suggestion and novel resource—essentially modified the science and practice of war, multiplying its engineering capabilities, re-shaping its manœuvres, filling its armory with new engines of destruction, and, on the other hand, alleviating its horrors by sanitary provisions, which, for grandeur of organization and completeness of detail, offer examples to all future time.

Already we recognize in the conduct of the Franco-Prussian preliminaries an occasional inspiration from our experience. Prussia, probably least prepared for an immediate contact, most immediately avails herself of the lessons taught by the American struggle. Like the Confederates, she forthwith extinguishes every beacon on her coast and removes the light-boats and buoys from her channels. Following the Union precedent at Charleston and the Rebel at Savannah, she forbids approach to her commercial cities by sinking stone-freighted crafts at the mouth of the Elbe and

Weser. On land she proposes, it is said, to reproduce our earthwork system, the territory of the Rhine provinces "being covered with improvised works of this description." Her people likewise, outside of the armed population, have caught the blessed conception of American humanity, and are forming sanitary and relief associations, whose merciful action is largely sustained by contributions from Germans in the United States. The inauguration of a general gunboat service on the



Rhine, and its prospective use on other German rivers, is an obvious adoption by France of an American precedent; and, as we show in another article, France is also indebted to us for the idea of her much-vaunted *mitrailleuse*—not to speak of the iron-clads which she has obtained from an American ship-yard.

Profiting further by the experience of American warfare, the French troops at Châlons have for two years been drilled in the use of the spade. Last summer the Imperial Guard, in camp at St. Maur, was practised in throwing up shelter

trenches, or rifle pits, as we are accustomed to call them. The use of *trenchées abris* is now a recognized feature in the French service, though they do not seem to have settled upon any satisfactory plan for providing their troops with the necessary implements for intrenching. A recent clever French writer, a captain of infantry, objects to the addition of the spade to the weight of the soldier's equipments, and deprecates the slowness of an advance with the spade as destructive of French *elan*. Austria, who learned at Sadowa so sharp a lesson of the necessity of providing her troops with means of protection against breech-loaders and shell-guns, has adopted the spade among her military equipments. Every third man in the Austrian infantry now carries a short-handled and broad-bladed spade, called the *Linneman*, on his left side, *en bandoulière*.

During some of the marches of the Army of the Potomac which we witnessed, it was the officers and not the men who carried the spade. Experiments in the Austrian encampment at Brüch showed that with the help of the *Linneman* a company could in five minutes shelter itself completely with a row of rifle mantlets. In England, too, the spade has come into favor, as experiments made at Dartmoor last year proved that four-fifths of the hits from a 12-pounder shell gun were turned aside by the shelter trenches. The sandbag is advocated in preference to the shelter trench in an article which we published last week from an English journal; but Colonel GRAHAM, representing the English engineers, has strenuously urged the trench in a paper read before the United Service Institute. In this paper, Colonel GRAHAM speaks of the American steel shovel as the best article yet offered, and intimates that lighter tools have been found too weak in hard soil. He recommends that one man in each file be provided with a spade, or that the Royal Engineer train have them always ready to be issued to the men when occasion calls for them. The spade he means weighs 2 1-2 pounds, besides its sheath and straps. Captain HARCOURT, proposing a trowel-spade of the same weight, would have each soldier provided with it. The recommendation of our own St. Louis board is in favor of the trowel bayonet invented by Lieutenant RICE, their only doubt being as to its effect on the morale of the men.

We present an illustration of this new bayonet, for which we are indebted to Messrs. SCHUYLER, HARTLEY & GRAHAM, the agents of the inventor. We have but little doubt that it will secure a place among the essential equipments of the soldier, and that hereafter our armies will be provided in a single weapon with the means of both offensive and defensive warfare. In view of the recognition the spade is receiving from military authorities everywhere, McCLELLAN must smile with satisfaction (as he recalls the outcry which was raised in the early days of the Rebellion against his wise precautions in the way of sheltering troops in the field).

The weight of the Rice bayonet need not exceed one and a half pounds when properly made, and it is by no means unsightly in appearance, except it be so to the enemy. We think they would, on the whole, prefer to run rather than wait to be discomfited by it.

THE ARMY.

COMPANIES C and K, Thirteenth Infantry, were to leave Camp Douglas, Utah, on the 28th ult., for Provo, Utah, and build a new post near that place. Brevet Colonel A. L. Hough, captain Thirteenth Infantry, in command.

THE post of Corpus Christi, Texas, and the subsistence and quartermaster's depot at this place, are discontinued. The troops (Company B, Tenth Infantry, and Company L, Fourth Cavalry) leave for Ringgold Barracks in a few days. The public property worth transportation is to be transferred to Ringgold Barracks, and the rest sold at auction.

IN accordance with instructions from the Adjutant General's Office, dated February 5, 1870, seventy-five mounted general service recruits (white) from those now disposable at the Fort Leavenworth depot have been assigned to the Seventh U. S. Cavalry. Brevet Major-General S. D. Sturgis, colonel Seventh Cavalry, will give the necessary orders for their equable distribution among the companies of that regiment. The recruits will be armed and equipped at Fort Leavenworth.

THE Acting Commissioner of Indian Affairs received, August 1, a telegram through the Adjutant-General's Office, from Brevet Major-General J. J. Reynolds, informing him that official reports from General Oakes, Fort Richardson, represent that a part of Texas is infested with Indians armed with repeating arms, carbines, rifles, and revolvers, well mounted and clothed. Captain McClelland, of the Sixth Cavalry, with 55 men, had a severe engagement in Baylor county on the 12th with 250 Indians. He lost two men and killed 15 Indians.

IN reply to a letter from the Department of the South, the Commissary-General states that it is his wish that the latter part of paragraph 4, of Circular No. 1, current series, shall be construed liberally with reference to enlisted men, and that, as far as may be practicable, without adding too greatly to the labor of the commissaries making sales, and without opening the door to abuses, the enlisted men may enjoy the benefits conferred by the act of July 28, 1866. With this view no objection is seen to the sale of authorized supplies to enlisted men messing by themselves on orders by the commanding officer. It is understood that the large majority of enlisted men of a company form one mess, and that the number messing by themselves is small; consequently the additional labor, and liability to abuse, will not be great.

THE Lieutenant-General commanding being about to absent himself temporarily from his command, the General of the Army directs that during such absence the department commanders of the Military Division of the Missouri shall report direct to him. They will send to the headquarters at Chicago, for file and record, copies of all the papers they send direct to the General of the Army, so that the records there may be continued unbroken and complete. They will address as heretofore all papers pertaining to the respective staff departments. Such papers will be acted upon, as usual, by the chiefs of those departments at Chicago, who will send with appropriate endorsements to the Adjutant-General of the Army, for the consideration and action of the General-in-Chief, and the heads of the proper staff departments, all those which have heretofore required the action of the Lieutenant-General commanding. The usual routine of official business, requiring the issuing of special orders, etc., will continue to be performed by the assistant adjutant-general of the military division under the authority of the General of the Army.

ORDERS from headquarters of the Department of Dakota direct that on the arrival at Fort Randall, D. T., of Companies B and G of the Twenty-second Infantry, Companies C and D of the regiment be relieved from duty at that post, and proceed without unnecessary delay to take post, the former at Old Ponca Agency, the latter at Whetstone Agency, relieving the companies of the Fourteenth Infantry now stationed at those points, which will proceed at once to Fort Randall. On their arrival, the commanding officer of the Fourteenth will proceed with the field, staff, and band of the regiment, and the six companies thus consolidated, to Omaha, Nebraska, and report to the commanding general Department of the Platte for further orders. When Companies I and K of the Twenty-second Infantry shall have been filled up with recruits at Fort Sully to or near the maximum, they will proceed to and take post, the former at Crow

Creek Agency, the latter at Lower Brulé Agency, relieving the companies of the Fourteenth Infantry now garrisoning those stations, which upon being relieved will proceed under command of the senior officer present to Omaha, Nebraska, and report to the commanding general Department of the Platte for further orders. Assistant Surgeon C. S. De Graw will accompany the first battalion, and Assistant Surgeon C. L. Heizman the second. The hospital steward now on duty at regimental headquarters will accompany the first battalion.

THE following circular has just been issued by the Second Auditor of the Treasury:

SECOND AUDITOR'S OFFICE, August 1, 1870.

1. No action can be taken on claims for bounty under the decision of the Supreme Court of March 14, 1870, by the accounting officers, until further legislation by Congress, as the Adjutant-General cannot designate the regiments to which said decision applies; the President's proclamation and the general orders of the War Department, upon which the decision is based, having authorized the raising of only forty regiments, while eighty-two were accepted.

2. By the act of July 30, 1870, the fourth section of the act of March 3, 1869, entitled "An act in relation to additional bounties, and for other purposes," is repealed, and the time for filing bounty claims under the act of July 28, 1866 (additional bounty), is extended to January 13, 1871.

3. Soldiers who enlisted under the act of July 4, 1864, are not entitled to the unpaid installments of bounty under section 1, act of March 3, 1869, and the decision of the Attorney-General of January 19, 1870, unless their discharge certificates declare them to be discharged by reason of "expiration of term of service."

4. The bill which passed the House of Representatives giving eight and one-third dollars per month to each soldier during his actual service, not having passed the Senate, is not a law.

5. No law granting bounty was enacted by the Forty-first Congress, nor has any such law been enacted since the act of March 3, 1869.

6. In all cases where blanks and instructions for the presentation of claims for bounty by claimants are requested, the service of the soldier, the date and period of each enlistment, the date and cause of discharge, or, if the soldier is dead, the date and cause of death, the relationship of the nearest heirs, and what bounty is claimed, should be fully stated. Respectfully,

E. B. FRENCH, Auditor.

ABSTRACT OF SPECIAL ORDERS

Issued from the Adjutant-General's Office for the week ending August 1, 1870.

Tuesday, July 26.

By direction of the President, First Lieutenant Edwin T. Bridges, unassigned, is hereby transferred to the Thirteenth U. S. Infantry, and upon the completion of the duties upon which he is now engaged, will report for duty to his regimental commander.

Major L. C. Bootes, unassigned, is hereby relieved from duty as Indian agent, and will await orders.

First Lieutenant George M. Fleming, unassigned, is hereby relieved from duty as Indian agent, and will proceed to his home and await orders.

Wednesday, July 27.

The Quartermaster's Department will furnish Major P. G. Hall, paymaster, with fuel and quarters for the month of July, 1870, while on duty in this city under Special Orders No. 50, March 12, 1870, from this office, settling his accounts with the Government, provided he has not been furnished in kind or commutation therefor elsewhere.

Second Lieutenant James M. Burns, Seventeenth U. S. Infantry, is hereby authorized to draw commutation of fuel and quarters from the 20th day of June to the 21st day of July, 1870, while in attendance before the Hustings Court, Richmond, Virginia, as a witness in the case of Private John Gerhiser, Company E, Seventeenth U. S. Infantry.

Leave of absence for twenty-five days, from August 7, 1870, is hereby granted Brigadier-General Joseph Holt, Judge-Advocate-General.

Paragraph 5, Special Orders No. 173, July 23, 1870, from this office, directing Captain Garrick Mallory, unassigned, to repair to Washington, D. C., and report in person to the Judge-Advocate-General for temporary duty in the Bureau of Military Justice, is hereby rescinded.

Leave of absence for six months, on surgeon's certificate of disability, is hereby granted Major George A. Williams, Twentieth U. S. Infantry.

The resignation of Second Lieutenant David H. McComas, U. S. Army, unassigned, has been accepted by the President, to take effect July 26, 1870, on condition that he receive no final payments until he shall have satisfied the Pay Department that he is not indebted to the United States.

The Quartermaster's Department will furnish August F. Walzer, formerly private Company E, Second Battalion Fourteenth U. S. Infantry, with transportation from Pelham, City Island, New York Harbor, to this city, to enable him to enter the Soldiers' Home, the cost of which will be refunded to the Quartermaster's Department by the Surgeon-General U. S. Army, from the fund appropriated for the benefit of discharged soldiers by act of Congress approved July 5, 1863.

The extension of leave of absence granted Captain B. B. Keeler, unassigned, in Special Orders No. 39, June 19, 1870, from headquarters Military Division of the South, is hereby further extended thirty days.

The leave of absence granted Captain James Biddle,

Eleventh U. S. Infantry, in Special Orders No. 42, June 13, 1870, from headquarters Department of Texas, is hereby extended sixty days.

Captain Louis E. Crone, unassigned, is hereby detailed on recruiting service, and will report in person to the superintendent Mounted Recruiting Service, Carlisle Barracks, Pennsylvania, for assignment to duty.

First Lieutenant E. C. Gaskill, unassigned, will repair without delay to Carlisle Barracks, Pennsylvania, and report in person to the superintendent Mounted Recruiting Service for duty.

Captain Charles D. Viele, unassigned, will report in person without delay to the superintendent General Recruiting Service, New York city, for assignment to duty.

Captain R. L. Kilpatrick, unassigned, is hereby detailed on recruiting service, and will proceed without delay to New York city, New York, and report in person to the superintendent General Recruiting Service for assignment to duty.

Friday, July 29.

Upon the recommendation of the Quartermaster-General, the following changes in the stations and duties of military storekeepers of the Quartermaster's Department are hereby made: Captain V. Van Antwerp is assigned to Schuylkill Arsenal, Pennsylvania. He will proceed to Philadelphia, Pennsylvania, and relieve Captain William H. Gill, who, on being relieved, will proceed to Fort Union, New Mexico, and report thence by letter to the commanding general and the chief quartermaster Department of the Missouri for duty at Fort Union. Captain Charles A. Allgood, on the breaking up of the quartermaster's depot at Fort Monroe, Virginia, as directed by Special Orders No. 137, July 13, 1870, from headquarters Department of the East, will proceed to Baltimore, Maryland, and take station there as military storekeeper and acting assistant quartermaster. Captain John F. Rodgers is relieved from duty in the Military Division of the Missouri and assigned to the quartermaster's depot at Jeffersonville, Indiana. He will proceed to Jeffersonville and report to the officer in charge of the depot, to relieve Captain G. A. Hull, who will turn over the property in his charge to Captain Rodgers, and then report by letter to the Quartermaster-General for orders. Captain N. D. A. Sawyer will proceed without delay to San Antonio, Texas, via Austin, reporting at headquarters Department of Texas for duty at San Antonio. Captain Addison Barrett is assigned to the Military Division of the Pacific, and on being relieved from duty at Charleston, South Carolina, will proceed to San Francisco, California, and report to the commanding general and chief quartermaster Military Division of the Pacific for duty in that division.

Permission to go beyond sea during his present leave of absence as a graduate of the U. S. Military Academy, West Point, New York, is hereby granted Second Lieutenant Charles W. Larned, Third U. S. Cavalry.

By direction of the President, and in accordance with section 26 of the act of Congress approved July 28, 1866, Second Lieutenant Clinton H. Tebbetts, Fourth U. S. Cavalry, is hereby detailed as professor of military science and tactics at the Kentucky University, Lexington, Kentucky.

Permission to delay ten days in complying with so much of paragraph 2 of this order as directs him to proceed to Philadelphia, Pennsylvania, and relieve Captain William H. Gill, military storekeeper, Quartermaster's Department, is hereby granted Captain V. Van Antwerp, military storekeeper, Quartermaster's Department.

The leave of absence granted Major H. C. Ransom, quartermaster, in Special Orders No. 121, May 25, 1870, from this office, is hereby extended thirty days.

Leave of absence for thirty days is granted Post Chaplain E. B. Tuttle, from the expiration of the permission to delay complying with Special Orders No. 135, June 11, 1870, from this office, directing him to report to the commanding general Department of Texas, granted him in Special Orders No. 150, of June 29, 1870, paragraph 6.

Saturday, July 30.

The Quartermaster's Department will furnish John C. Weber, formerly sergeant Company E, Fourth U. S. Cavalry, with transportation from Philadelphia, Pennsylvania, to this city, to enable him to enter the Soldiers' Home, the cost of which will be refunded to the Quartermaster's Department by the Surgeon-General U. S. Army, from the fund appropriated for the benefit of discharged soldiers by the act of Congress approved July 5, 1863.

A board of examination having found Lieutenant-Colonel John B. McIntosh, U. S. Army, unassigned, "incapacitated for active service, and that his incapacity is the result of an incident of the service, being caused by the amputation of his right leg, resulting from a gunshot wound received by him at the battle of Winchester, Virginia, September 19, 1864, he being at the time a brigadier-general of volunteers, and in command of the First brigade, Third division, Cavalry Corps, Army of the Potomac," the President directs that his name be placed upon the list of retired officers of that class in which the disability results from long and faithful service, or from wounds or injury received in the line of duty. In accordance with section 32 of the act approved July 28, 1866, Lieutenant-Colonel McIntosh is, by direction of the President, retired with the full rank of brigadier-general.

As soon as the recruits ordered by paragraph 5, Special Orders No. 160, July 11, 1870, from this office, to be sent to the Seventeenth U. S. Infantry in the Military Division of the Missouri, have been forwarded, the superintendent General Recruiting Service, New York city, will forward, under proper charge, in detachments of convenient size, two hundred recruits from those which are or may from time to time become disposable at Fort Columbus, New York Harbor, to Omaha, Nebraska, where they will be reported, upon arrival, to the commanding general Department of the Platte for assignment to the Fourteenth U. S. Infantry.

Captain Francis E. Lacey, Tenth U. S. Infantry, is hereby authorized to draw advance mileage from Atlanta, Georgia, to Brownsville, Texas, under Special Orders No. 154, July 5, 1870, from this office, directing him to report to his regimental commander.

Monday, August 1.

The telegraphic order of July 30, 1870, from this office, granting a further extension of thirty days to the extension of leave of absence granted First Lieutenant George Mitchell, unassigned, in Special Orders No. 146, June 24, 1870, from this office, is hereby confirmed.

The telegraphic order of July 30, 1870, from this office, directing First Lieutenant Constant Williams, Seventh U. S. Infantry, to report in person to the superintendent General Recruiting Service, New York city, to accompany recruits to the Department of Dakota, and then to join his company, is hereby confirmed.

First Lieutenant H. R. Williams, unassigned, is hereby relieved from duty on recruiting service, and will proceed to his home and await orders.

In addition to his present duties, First Lieutenant A. E. Woodson, unassigned, will enlist and re-enlist at Sioux City, Iowa, such applicants as may desire to join organizations serving in the Department of Dakota, and forward them to such points as may be designated by the commanding general of that department, to whom he will communicate from time to time the number of men enlisted, etc.

ARMY PERSONAL.

CHAPLAIN Dudley Chase, U. S. Army, was assigned, July 1, to duty at Camp Gaston, California.

HOSPITAL Steward Ivan von Torp, U. S. Army, now at Fort Wadsworth, D. T., is assigned to duty at Fort Butler, D. T.

SECOND Lieutenant G. S. L. Ward, Twenty-second Infantry, is announced as acting ordnance officer of the Department of Dakota.

LEAVE of absence for thirty days has been granted to Brevet Lieutenant-Colonel C. G. Freudenberg, captain Fourteenth Infantry.

MAJOR W. R. Gibson, U. S. Army, is assigned to duty at the headquarters Department of the Platte, under the orders of the chief paymaster of the Department.

ACTING Assistant Surgeon J. C. Byrnes, U. S. Army, is assigned to duty at Lower Brulé Agency, D. T., and will report to the commanding officer thereof for duty.

CAPTAIN Edward D. Baker, assistant quartermaster U. S. Army, was released, July 15, to report to the headquarters Military Division of the Pacific for further orders.

BREVET Major L. M. Kellogg, captain U. S. Army, late Twentieth Infantry, has been relieved from duty in the Department of Dakota, and directed to repair to his home and await orders.

HOSPITAL Steward Julius Huthstainer, U. S. Army, was ordered, July 19, to proceed from Fort Jackson, Louisiana, to Fort Pike, Louisiana, and report to the commanding officer for duty.

SECOND Lieutenant Eugene O. Fehet, Second Artillery, was ordered, July 15, to report to the commanding officer of the Presidio, San Francisco, for duty with his battery (M) at that station.

PERMISSION to delay twenty days in complying with paragraph 3, Special Orders No. 110, current series, from these headquarters, has been granted Major Rodney Smith, paymaster U. S. Army.

HOSPITAL Steward Thomas D. Price, U. S. Army, was relieved, July 15, from duty in the office of the Medical Director Department of California, and is assigned to duty at Alcatraz Island, harbor of San Francisco.

FIRST Lieutenant Samuel B. McIntire, Second Artillery, brevet captain, was ordered, July 2, to report for duty to the commanding officer of Angel Island, until an opportunity offers to rejoin his proper station.

SECOND Lieutenant Barnet Wager, Second Artillery, was ordered, June 29, to proceed without delay to Camp Winfield Scott, Nevada, taking with him all recruits at Angel Island for Company I, First Cavalry, at that station.

On the recommendation of his post commander, based on his good conduct, the unexpired portion of the sentence of general court-martial in the case of Private William Powderly, Company I, Twenty-first Infantry, is remitted.

LEAVE of absence for thirty days, with permission to leave the limits of the Department of Texas and to apply to Division headquarters for an extension of thirty days, was, July 18, granted Major William Smith, paymaster U. S. Army.

LEAVE of absence for thirty days was, July 23, granted Brevet Major George N. Bomford, first lieutenant Seventh Infantry, with permission to apply to headquarters Military Division of the Missouri for an extension of thirty days.

PERMISSION to delay joining his proper station was, July 23, granted Brevet Lieutenant-Colonel J. C. Bates, captain Twentieth Infantry, for twenty days, upon the expiration of which he will proceed to join his station at Fort Wadsworth, D. T.

PARAGRAPH 3, Special Orders No. 41, current series, from headquarters Department of Texas, has been so modified as to direct Acting Assistant Surgeon T. B. Davis, U. S. Army, to proceed to Fort McKavett, Texas, and report to the commanding officer for duty.

A BOARD of officers was, July 23, appointed to investigate all the circumstances connected with the loss by fire of Government buildings at Fort Ripley, Minn., on the night of the 20th ult. Detail for the board: Captain S. T. Norvell, U. S. Army, unassigned; Brevet Major Douglass Pope, first lieutenant U. S. Army, unassigned.

SUBJECT to the approval of the General-in-Chief of

the Army, the following transfers of company officers in the Seventh Infantry are directed by orders from headquarters Department of Dakota: First Lieutenant George N. Bomford, from Company D to Company B; First Lieutenant Wm. S. Starring, from Company B to Company D. On the expiration of his present leave of absence, Lieutenant Bomford will join his company at Fort Shaw, M. T., via the Union Pacific Railroad.

In accordance with General Orders No. 17, headquarters of the Army, 1869, First Lieutenant P. G. Wood, Twelfth Infantry, was, July 13, at his own request, placed on waiting orders. By orders from headquarters, Department of California, July 13, he was ordered to proceed to Angel Island, California, and report for duty to the commanding officer of that station.

AUTHORITY to delay reporting at the headquarters of his regiment for thirty days, with permission to apply at headquarters Military Division of the Missouri, for an extension until such time as he may have heard the result of his application to be placed upon the retired list of the Army, has been granted Brevet Brigadier-General O. L. Shepherd, colonel Fifteenth U. S. Infantry.

LEAVE of absence for thirty days, with permission to leave the limits of the Department of Texas, and to apply to division headquarters for an extension of twenty days, was granted Major Lyman Bissell, Eleventh U. S. Infantry, and to Brevet Captain Handson H. Crews, first lieutenant Nineteenth U. S. Infantry, July 22. Leave of absence for thirty days was, at the same date, granted First Lieutenant George E. Albee, Twenty-fourth U. S. Infantry.

FIRST Lieutenant E. G. Mathey, Seventh U. S. Cavalry, was ordered, July 28, to proceed without delay from Fort Hays, Kansas, to Kit Carson, C. T., where he will report in person to Brevet Major-General C. R. Woods, commanding troops in the field, for duty with Troop B of that regiment. First Lieutenant Donald McIntosh, Seventh U. S. Cavalry, now at Fort Hays, Kansas, will report without delay for duty with Troop G of that regiment.

CAPTAIN George B. Carse of the Forty-fifth Infantry, unassigned, has been, by the direction of the President, ordered to be placed on the list to be retired under the provisions of the act recently passed. This is in consequence of wounds received at Chancellorsville. Lieutenant-Colonel McIntosh, unassigned, incapacitated for active service, owing to the amputation of a leg, resulting from wounds received at Winchester, has been placed on the list of retired officers, with the full rank of brigadier-general.

THE following named officers will proceed as follows: Brevet Lieutenant-Colonel S. Woods, paymaster, to Camp Independence, California; Major C. J. Sprague, paymaster, to Camp Halleck, Winfield Scott, and McDermitt, Nevada; Major C. W. Wingard, paymaster, to the posts in the harbor of San Francisco and Benicia Arsenal, Camps Gaston and Wright, California, and Camp Klamath, Oregon, and pay the troops at these several posts to the 30th of June, 1870. After performing these duties, the officers mentioned will return to their stations in San Francisco.

ACTING Assistant Surgeon J. H. Collins, U. S. Army, was ordered, July 25, to report in person without delay to Brevet Major-General C. R. Woods, commanding troops in the field, for assignment to duty with the detachment commanded by Brevet Colonel M. A. Reno, Seventh U. S. Cavalry. Assistant Surgeon Henry Lippincott, U. S. Army, will perform the duties of medical officer at Fort Hays until the arrival of Acting Assistant Surgeon T. B. Chase, U. S. Army, now under orders for that post. This order does not relieve Surgeon Lippincott from his present duties.

THE attention of officers and privates of the old Third Corps of the Army of the Potomac, and members of the Third Corps Union Association or Society, is called to the fact that the author of "A Personal and Military History of Major-General Philip Kearny" has commenced the preparation of the history of the "Old Third Corps." Any information from private sources will be gratefully received, examined, compared, and, if susceptible of incorporation, duly acknowledged. If any party connected with either of these organizations is aware of any work relating thereto, published in this country or abroad, a reference stating name of book, author, place and date of publication, will confer a favor by furnishing these facts to General De Peyster, Tivoli Post-office, Dutchess county, N. Y.

COURTS-MARTIAL.

A GENERAL Court-martial was appointed to meet at Fort Ripley, Minn., on Wednesday, the 27th of July, 1870. Detail for the court: Brevet Colonel E. C. Mason, captain Twentieth Infantry; Captain John Hartley, Twenty-second Infantry; Captain C. W. Miner, Twenty-second Infantry; Captain S. T. Norvell, U. S. A., unassigned; Brevet Major D. Pope, first lieutenant U. S. A., unassigned; First Lieutenant Stanton Weaver, Twentieth Infantry; Second Lieutenant W. H. Hamner, Twentieth Infantry. Brevet Captain S. E. Carncross, first lieutenant Twentieth Infantry, judge-advocate.

A GENERAL Court-martial was constituted to assemble at Alcatraz Island, harbor of San Francisco, July 21. Detail for the court: Lieutenant-Colonel George W. Wallace, Twelfth Infantry; First Lieutenant W. P. Voce, Second Artillery, brevet captain U. S. Army; First Lieutenant Charles T. Bissell, Second Artillery; First Lieutenant James E. Eastman, Second Artillery; Second Lieutenant Edward R. Theller, Twenty-first Infantry; Second Lieutenant Thomas T. Thornburgh, Second Artillery; Second Lieutenant Eugene O. Fehet, Second Artillery. Captain Edward R. Platt, Second Artillery, brevet lieutenant colonel U. S. Army, judge-advocate.

THE proceedings in the case of Sergeant Joseph M. Dickey, Company C, Twenty-third Infantry, acquitted of the charge of fraudulently selling the property of the United States, by a court-martial held at Camp Warren, Oregon, having been carried on after the hours specified by law, except when the court is ordered to sit without regard to hours, have been set aside by Brevet Major-General George Crook, U. S. Army, commanding the Department of Columbia, as irregular and invalid, and are disapproved. The prisoner will be released from arrest and restored to duty.

A GENERAL Court-martial is appointed to meet at Fort Shaw, M. T., August 10. Detail for the court: Brevet Major-General John Gibbon, colonel Seventh Infantry; Brevet Major S. A. Russel, captain Seventh Infantry; Brevet Major D. W. Benham, captain Seventh Infantry; Brevet Major H. R. Freeman, captain Seventh Infantry; Captain T. S. Kirtland, Seventh Infantry; First Lieutenant H. W. Wessels, Jr., Seventh Infantry; Brevet Captain C. F. Larrabee, first lieutenant Seventh Infantry; First Lieutenant Wm. Quinton, Seventh Infantry; Brevet Major A. H. Jackson, second lieutenant Seventh Infantry; Brevet Captain M. C. Sandbourne, second lieutenant Seventh Infantry; Second Lieutenant Daniel Robinson, Seventh Infantry; Second Lieutenant F. M. H. Kendrick, Seventh Infantry. First Lieutenant J. M. J. Sanno, adjutant Seventh Infantry, judge-advocate.

CHANGES OF STATIONS.

THE following is a list of the changes of stations of troops reported at the War Department since last report:

Company K, Sixth Infantry, from Little Rock, Ark., to Fort Gibson, I. T., July 17.
Company D, Second Infantry, from Summerville, Ga., to Huntsville, Ala., July 25. Ordered.
Company B, Eighteenth Infantry, from Atlanta, Ga., to Taylor Barracks, Louisville, Ky., July 27.
No change in headquarters or companies of cavalry or artillery reported since July 26.

THE NAVY.

THE Editor invites for this department of the JOURNAL all facts of interest to the Navy, especially such as relate to the movements of officers or vessels.

VARIOUS NAVAL MATTERS.

THE *Miantonomoh* was put out of commission July 28, and all of her officers detached.

ORDERS have been given to land the stores of the *Sabine* at Boston, and she will be repaired.

THE United States steamer *Suvarra*, from St. Domingo the 13th ult., left St Thomas for New York July 16.

THE *Worcester* and *Ticonderoga* are fast approaching completion, six weeks being the time assigned for them.

THE second class screw steamer *California*, carrying 21 guns, recently fitted out at the Portsmouth (N. H.) Navy-yard, is now ready for sea, and her officers have been ordered to report on the 1st of September. She will sail for the Mediterranean, to join the European squadron. Captain Thomas G. Corbin has been ordered to the command of her.

A PHILADELPHIA correspondent writes as follows: "Some ignorant or designing person has furnished you some very incorrect statements in reference to the alterations in the U. S. steamer *Brooklyn* at this Navy-yard. Your informant states, page 789 of your journal, that the addition of a gun deck to the *Brooklyn* gives no additional space for the men, but is all taken up in officers' quarters. This statement is false and malicious, the facts being that the spar deck being put on the *Brooklyn* gives her ample room to berth five hundred and fifty men comfortably; and as her complement is three hundred and fifty, there will be room to spare."

PAYMASTER John C. Cash, U. S. Marine Corps, has addressed the following letter to Colonel M. R. Kintzing, commanding marines, Navy-yard, Philadelphia: "The Second Comptroller of the Treasury having decided that the law relating to retained pay of private soldiers applies to men serving on a re-enlistment as well as those on a first term, you will be pleased to retain one dollar per month from all privates on the books of your station, to commence from the 1st instant. The Second Comptroller has also decided that the additional pay for re-enlistment is granted for every period of five years' service, and that in order to entitle marines to this allowance they will have to serve one year on their first re-enlistment before they can be entitled to the two dollars per month; two years on a second re-enlistment before they can be entitled to the additional one dollar per month; three years on a third re-enlistment, etc., and the fourth re-enlistment without any increase at all; thus increasing the pay one dollar per month for every five years' service. I will be obliged to you to have the rates of pay corrected in accordance with this decision."

THE U. S. ship *Sabine* arrived at Boston on the 23d of July, thirty-two days from Bahia, Brazil. She left New York on the 15th of June, and Boston the 10th of July of last year, with the graduated class of midshipmen of 1869, on a cruise of instruction. The *Sabine* visited Portsmouth, England; Cherbourg, France; Lisbon, Portugal; Cadiz, Spain; Gibraltar; Nice, France; Genoa, Spezzia, and Naples, Italy; Funchal, Madeira; Rio de Janeiro and Bahia, Brazil. The following is a list of her officers: Commander J. G. Walker, commanding; Lieutenant-Commander G. C. Remy, executive officer; Lieutenant-Commander George P. Ryan, navigator; Lieutenant-Commanders W. R. Bridgman, J. R. Bartlett, P. H. Cooper, T. F. Jewell, and C. J. Train; Captain H. B. Lowrey, U. S. Marine Corps; Passed Assistant Paymaster E. N. Whitehouse; Surgeon George Peck; Passed Assistant Surgeon D. McMurtrie; Assistant Surgeon Henry Stewart; Captain's Clerk, Jacob Rich; Paymaster's Clerk, H. J. Cuthbert; Carpenter, Joseph G. Myers; Boatswain, Charles Miller; Gunner,

George W. Omensetter; Sailmaker, George W. Giett. The class of midshipmen originally numbered sixty, but twenty were transferred to vessels of the European squadron for duty. The midshipmen are ordered to report to the Naval Academy, September 20, for examination for promotion to the grade of ensign.

LIEUTENANT Ezra Leonard died at the Naval Hospital at Chelsea, Mass., on the 29th ult.

THE U. S. steamer *Saco* was placed in commission at Norfolk Navy-yard, at 5:30 P. M., July 22. The crew were put on board at 6 P. M. The U. S. steamer *Quinnabaug*, Commander Barrett commanding, has been dismantled and her stores sent ashore. The U. S. steamer *Saco*, Commander Terry commanding, left the yard (July 26,) at 6:30 P. M., and anchored off Fort Norfolk, where she will receive her powder. Sergeant George A. Lord, U. S. Marine Corps, died at this yard on the night of July 28.

IN accordance with authority from headquarters of the Army, the following named officers of the staff at headquarters Department of Missouri were ordered July 30 to take post at Leavenworth until quarters can be procured for them at Fort Leavenworth: Lieutenant-Colonel N. H. Davis, assistant inspector-general U. S. Army; Major M. R. Morgan, chief commissary Department of the Missouri; Major G. W. Schofield, U. S. Army; Major D. G. Swain, judge-advocate; Captain C. B. Phillips, Engineer Corps; Assistant Surgeon J. V. De Haune, U. S. Army; First Lieutenant H. Jackson, Seventh U. S. Cavalry.

A CIRCULAR has been issued to the paymasters of the Navy from the Fourth Auditor's office, stating that from and after the 30th day of June, 1870, so much of the fourth section of the act of July 14, 1862, "making appropriations for the naval service for the year ending June 30, 1863, and for other purposes," as allows to persons in the naval service five cents per day in lieu of the spirit ration, is repealed, and from and after that day thirty cents shall in all cases be deemed the commutation price of the Navy ration. By order of the President of the United States, "an additional sum of one dollar and fifty cents per month is allowed to the pay of enlisted men in the Navy of the United States," from the first day of July, 1870.

THE funeral of Jonathan Mayhew Wainwright, late master in the U. S. Navy, took place at Trinity Chapel, in Twenty-fifth street, New York city, at 10½ A. M., on the 3d inst. The body of arrived here on Saturday. The deceased was grandson of the late Bishop Wainwright, and was appointed to the Naval School by President Lincoln. He was only twenty-two years of age at the time of his death. The funeral services at the church were in accordance with the forms of the Episcopal Church, and were conducted by Rev. Dr. Higbee, assisted by Rev. Dr. Swope. Among the naval officers present were Commander Harmony, Commander Whiting, Commander Hull, Lieutenant-Commander E. Hooker, and Paymaster Bissell. The pall-bearers were Master J. P. Morrill and Midshipmen Charles Briggs, J. J. Hunker, T. G. C. Salter, J. H. Bull, and H. R. Tyler. The mother of the deceased and a younger brother, Robert P. Wainwright, who had just entered the Military Academy at West Point, were the chief mourners, being the only surviving members of the family.

OUR correspondent in Philadelphia writes as follows: "On the 15th of July, the remains of Rear-Admiral Dahlgren arrived at the depot, Thirty-first and Market streets, Philadelphia, on the 6:45 P. M. train. There was an escort of a battalion of marines under command of Brevet Major Parker, waiting at the depot. After the arrival of the remains the battalion returned to barracks, leaving a detail of eight men under Sergeant Seely to accompany the body to the cemetery. General Sherman and other Army officers were present. On Monday, the 18th, a force of about five hundred workmen, consisting of carpenters, joiners, blacksmiths, painters, and riggers, were taken on in the yard, and were set to work on the *Brooklyn* and *Iroquois*. The former vessel will be ready for sea in a few weeks; and the *Iroquois* is being rebuilt from her spar deck up. These are the only two vessels there are getting ready here; the *Pohatan* is lying out in the stream. Enlistments for the Navy are very slow at this station. At the marine barracks all drills and parades have been suspended during the intense hot weather, and not before it was needed, as the duty is very hard, day on and day off; half the posts had to be taken off in order to furnish enough men for a draught of forty privates which went to Norfolk on the 20th of July. The garrison is at present commanded by Brevet Lieutenant-Colonel Forney during the absence of Colonel Kitzing, who is on furlough. The officers for duty are Brevet Major Parker and Lieutenant Niel; Lieutenant Meade being on furlough."

OBITUARY.

THE LATE ENSIGN J. M. WAINWRIGHT, U. S. N.

DIED, on Sunday, the 19th of June, 1870, on board the U. S. steamer *Mohican*, at the port of Mazatlan, Mexico, Ensign Jonathan M. Wainwright, U. S. Navy, from the effects of wounds received two days before, during an engagement with the piratical steamer *Forward*, in the Teacapan river. He was in command of one of the attacking boats, and fell gallantly, leading his men in the hottest of the fight.

Upon the eve of return, after a long absence, to his home and to the loved ones who so anxiously await him, he was suddenly cut down in the flower of life, while in perfect health, and with the brightest hopes and prospects for the future. Irreparable is their loss; great, also, is ours, to whom he was endeared by every engaging quality of character and mind. Possessed of marked abilities, he was a bright ornament to the profession of which he was so proud, and gave every promise of rising to a position of eminence and distinction. Courageous, manly, he was always kind and considerate in his intercourse with others, and he was universally beloved by officers and men.

To one, a classmate, who since boyhood had been at-

tached to him by the most intimate ties of friendship and esteem, and who knew so well his worth, his memory will always be most sacred—his noble character most dear.

Truly we loved him: deeply we lament him.

U. S. S. *Mohican*, MAZATLAN, MEXICO, July 1, 1870.

NAVY GAZETTE.

REGULAR NAVAL SERVICE.

ORDERED.

JULY 27.—Ensign Thomas A. De Bois, to the *Brooklyn* on the 15th of August.

Midshipmen William Rensen, William H. Van de Carr, and Henry M. Jacoby, to the *Shenandoah*.

Surgeon J. M. Faltz, to duty as a member of the Board of Examiners at Philadelphia.

Paymaster Thomas H. Swan, to the receiving ship at Boston.

JULY 29.—Lieutenant-Commanders David C. Woodrow and P. F. Harrington, Midshipmen John D. Keeler, George A. Calhoun, Whitman P. Ray, Halle C. Nye, M. F. Wright, Edward M. Hughes, Charles E. Vreeland, William E. Co-way, George W. Holman, and Thomas C. Spencer, Assistant Surgeon Horner L. Law, Boatswain Hallowell Dickinson, Acting Gunner John G. Foster, and Sailmaker Alexander W. Cassell, to the *California* on the 1st of September.

Master Harrison G. O. Colby, to the schooner *America*.

JULY 30.—Lieutenant-Commander Felix McCurley, to the Hydrographic Office on the 1st of September.

Chief Engineer George J. Barry, to the *California* on the 1st of September.

August 1.—Ensign Robert T. Jasper, to the schooner *America*.

Lieutenant Isaac I. Yates, to the *California* on the 1st of September.

August 2.—Lieutenant John S. Newell, to the *Guard*.

Gunner David A. Row, to the Navy-yard, Washington, D. C.

DETACHED.

JULY 27.—Lieutenant R. D. Hitchcock, from the *Guard*.

Surgeon C. J. Cleburne, from duty as a member of the Board of Examiners, and ordered to the *California* on the 1st of September.

Paymaster Joseph A. Smith, from the receiving ship *Ohio*, and ordered to the *California* on the 1st of September.

JULY 28.—Commander John G. Walker, from the command of the *Sabine*, and waiting orders.

Lieutenant-Commanders Theodore F. Jewell, W. R. Bridgman, J. R. Bartlett, P. H. Cooper, George C. Remey, George P. Ryan, and Charles J. Train, Surgeon George Peck, Passed Assistant Surgeon D. McMurtrie, Assistant Surgeon Henry Stewart, Boatswain Charles Miller, Gunner George W. Omensetter, Carpenter Joseph G. Myers, and Sailmaker George W. Giett, from the *Sabine*, and waiting orders.

Passed Assistant Paymaster E. N. Whitehouse, from the *Sabine*, and ordered to settle his accounts.

Midshipmen Charles A. Clarke, S. P. Comley, C. A. Bradbury, D. H. Mahan, Wm. F. Buckley, L. E. Bixler, F. S. Bassett, Karl Rohrer, J. A. Norris, W. E. B. Delehay, Sidney H. May, James W. Grayden, Wm. F. Low, Wm. A. Hadden, Henry F. Monahan, J. H. C. Coffin, Edward O. Macfarlane, H. C. Longnecker, H. A. Stanchard, D. V. Stuart, Edward E. Barry, Nelson F. Houston, J. B. Houston, James Franklin, N. E. Mason, John B. Briggs, Wm. H. Turner, Henry O. Handy, C. C. Paine, H. H. Buckingham, E. W. Wiley, Richard Mitchell, E. A. Field, C. K. Curtis, Charles R. Brown, E. J. Arthur, W. W. Kimball, N. J. K. Patch, Kossuth Niles, and U. R. Harris, from the *Sabine*, and ordered to the Naval Academy by the 30th of September for examination for promotion.

Lieutenant-Commander Thomas Nelson, from the receiving ship *New Hampshire*, and ordered to the *Saco*.

Lieutenant George Talcott, from the *Saco*, and ordered to the receiving ship *New Hampshire*.

Surgeon J. S. Messersmith, from the Naval Rendezvous, Philadelphia, and waiting orders.

Surgeon John S. Kitchen, from the *Dictator* on the 10th inst. and waiting orders.

JULY 29.—Captain Thomas G. Corbin, from ordnance duty at Philadelphia, and ordered to command the *California* on the 1st of September.

Lieutenants Charles H. Black, J. K. P. Ragsdale, and Charles E. Cotton, from the Naval Academy, and ordered to the *California* on the 1st of September.

Carpenter William D. Toy, from the Navy-yard, New York, and ordered to the *California* on the 1st of September.

Surgeon Edward S. Matthews, from the *Rendezvous*, Boston, and ordered to the *Shenandoah* by the 10th of August.

JULY 30.—First Assistant Engineer J. F. Sprague, from the Navy-yard, Boston, on the 15th of August, and ordered to the *California* by the 1st of September.

August 1.—Lieutenant-Commander George P. Ryan, from the Navy-yard, Portsmouth, N. H., and ordered to the *California* on the 1st of September.

Ensign Wm. M. Paul, from the *Portsmouth*, and ordered to return to the United States.

August 2.—Gunner Thomas Stewart, from the Navy-yard, Washington, and waiting orders.

Assistant Surgeon M. L. Ruth, from the *Dictator*, and waiting orders.

ORDERS REVOKED.

JULY 27.—The order detaching Chief Engineer W. H. Rutherford from the Navy-yard, Pensacola.

JULY 28.—The order of Lieutenant Chapman C. Todd, to the *Dictator*, and waiting orders.

JULY 29.—The orders of Lieutenant C. H. Judd and Surgeon Newton L. Bates, to the *Shenandoah*.

APPOINTED.

JULY 30.—William T. Devlin, an acting gunner in the Navy.

CHANGES IN THE MARINE CORPS.

The following are the changes in the officers of the Marine Corps since last memoranda, viz.

First Lieutenant Wm. S. Mose, U. S. Marine Corps.—On July 19 detached from the Annapolis, Md., station, and ordered to report to the commandant of the Philadelphia Navy-yard as the officer detailed to command the marines on board the U. S. steamer *Brooklyn*, now fitting out for service at that yard.

First Lieutenant Wm. Wallace, brevet captain U. S. Marine Corps.—On July 19 detached from Marine Barracks, Washington, D. C., and ordered to Annapolis, Md., for duty at the Naval Academy.

Second Lieutenant Fred P. Ely, U. S. Marine Corps.—On July 19 detached from Marine Barracks, Washington, D. C., and ordered to Boston, Mass., station for duty.

Second Lieutenant C. Shailer, U. S. Marine Corps.—On July 19 detached from Marine Barracks, Washington, D. C., and ordered to Boston, Mass., station for duty.

Second Lieutenant Oloay C. Herriman, U. S. Marine Corps.—On July 19 detached from Marine Barracks, Washington, D. C., and ordered to the Norfolk, Va., station for duty.

Robert F. Stockton.—On July 22 appointed a second lieutenant in U. S. Marine Corps.

Second Lieutenant Robert F. Stockton.—On July 22 ordered to report to Colonel M. R. Kitzing, U. S. Marine Corps, Philadelphia, Pa., by the 1st of August for duty at that station.

First Lieutenant George E. Hugcock, brevet captain U. S. Marine Corps.—On July 23 detached from the Portsmouth, N. H., station, and ordered to report to the superintendent of the Naval Academy, Annapolis, Md., for duty.

First Lieutenant William Wallace, brevet captain U. S. Marine Corps.—On July 25 his orders of July 19 ordering him to the Naval Academy, Annapolis, Md., were revoked.

First Lieutenant E. C. Saltmarsh, U. S. Marine Corps.—On July 26 ordered to report to the commandant of the Brooklyn, N. Y., Navy-yard for duty on board the U. S. steamer *Guerrero*, now fitting out for service in the European Fleet.

Second Lieutenant Allen G. Kelton, U. S. Marine Corps.—On July 26 ordered to report to the commandant of the Boston, Mass., Navy-yard for duty on board the U. S. steamer *Shenandoah*, now fitting out for service in the European Fleet.

JULY 27.—All enlistments in the U. S. Marine Corps will from this day forward be for five instead of four years, in accordance with a recent act of Congress.

THE NAVY BILL.

AN ACT making appropriations for the naval service for the year ending June 30, 1871, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and they are hereby appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for the naval service of the Government for the year ending the 30th of June, 1871.

For pay of commissioned and warrant officers, and for mileage or transportation of officers travelling under orders, and for pay of the petty officers, seamen, ordinary seamen, landsmen, and boys, including men for the engineers' force, 8,500 men, at an average pay of \$300 each per annum, \$7,000,000.

For contingent expenses of the Navy Department, \$125,000.

BUREAU OF YARDS AND DOCKS.

For the Naval Asylum at Philadelphia.—For annual repairs of buildings and care of grounds, \$8,600.

For improvement of cemetery, \$500.

For support of the beneficiaries, \$54,000; and this and the two preceding sums shall be paid out of the naval pension fund.

For civil establishment at the Navy-yard, Kittery, New Hampshire.—For civil engineer, \$2,500; for draughtsman and clerk to civil engineer, at \$1,400 each; for clerk of pay-rolls and mustering clerk, \$1,500; for receiver and inspector of stores, \$1,500; for clerk to commandant, \$1,500; for clerk to receiver and inspector, \$1,500; for chief accountant, \$1,800; gate-keeper and detective, \$1,000; and for messenger at commandant's office, \$600; making in all, \$14,700.

At the Navy-yard, Boston, Massachusetts.—For civil engineer, \$2,500; for draughtsman and clerk to civil engineer, at \$1,400 each; for clerk of pay-rolls and mustering clerk, \$1,500; for receiver and inspector of stores, \$1,500; for writer to receiver and inspector of stores, \$939; for chief accountant, \$1,800; for one clerk to commandant, \$1,500; gate-keeper and detective, \$1,000; and for messenger far commandant's office, \$600; in all, \$14,139.

At the Navy-yard, New York city.—For civil engineer, \$2,500; for draughtsman and clerk to civil engineer, at \$1,400 each; for receiver and inspector of stores, \$1,500; for clerk of pay-rolls and mustering clerk, \$1,500; for clerk to commandant, \$1,500; for chief accountant, \$1,800; gate-keeper and detective, \$1,000; and for messenger for commandant's office, \$600; in all, \$13,200.

At the Navy-yard, Philadelphia, Pennsylvania.—For civil engineer, \$2,000; for draughtsman and clerk to civil engineer, at \$1,400 each; for receiver and inspector of stores, \$1,500; for clerk to commandant, \$1,500; for chief accountant, \$1,800; gate-keeper and detective, \$1,000; and for messenger to the commandant's office, \$600; in all, \$12,700.

At the Navy-yard, Washington, District of Columbia.—For civil engineer, \$2,000; for draughtsman and clerk to civil engineer, at \$1,400 each; for receiver and inspector of stores, \$1,500; for clerk of pay-rolls and mustering clerk, \$1,500; for clerk to commandant, \$1,500; for chief accountant, \$1,800; gate-keeper and detective, \$1,000; and for messenger for commandant's office, \$600; in all, \$12,700.

At the Navy-yard, Norfolk, Virginia.—For civil engineer, \$2,000; for draughtsman and clerk to civil engineer, at \$1,400 each; for receiver and inspector of stores, \$1,500; for clerk of pay-rolls and mustering clerk, \$1,500; for clerk to commandant, \$1,500; gate-keeper and detective, \$1,000; and for messenger for commandant's office, \$600; in all, \$10,900.

At the Navy-yard, Pensacola, Florida.—For superintendent of yard improvements, \$1,875; for receiver and inspector of stores, \$1,500; gate-keeper and detective, \$1,000; for messenger for the office of the commandant, \$600; in all, \$4,975.

At the Navy-yard, Mare Island, California.—For civil engineer, \$3,000; for assistant civil engineer and draughtsman, \$1,800; for receiver and inspector of stores, \$1,875; for clerk of pay-rolls and mustering clerk, \$1,875; for clerk to commandant, \$1,875; for chief accountant, \$1,875; gate-keeper and detective, \$1,000; and for messenger for commandant's office, \$750; in all, \$13,875.

At the Naval Asylum.—For secretary to the governor, \$1,000; for steward, \$750; for matron, \$300; for six washers, at \$120 each; for cook, \$168; first assistant cook, \$120; second assistant cook, \$96; six laundresses, at \$120 each; eight scrubbers and house cleaners, at \$96 each; four laborers, at \$240 each; master-at-arms, \$300; and for ship's corporal, \$240; in all, \$6,142.

For contingent expenses of Bureau of Yards and Docks, viz: For freight and transportation of materials and stores; printing, stationery, and advertising; books, models, maps, and drawings; purchase and repair of fire-engines; machinery and patent-rights to use the same; repairs on steam-engines and attendance on same; purchase and maintenance of oxen and horses, and driving teams, carts, and timber; wheels for navy-yard purposes, and tools and repairs of same; postage on letters on public service, and telegrams; furniture for government houses and offices in navy-yards; coal and other fuel; candles, oils, and gas; cleaning and clearing up yard, and care of buildings; attendance on fires; lights; fire-engines and apparatus; incidental labor at navy-yards; water tax, and for toll and ferriages; pay of the watchmen in the yards; and for flags, awnings, and packing-boxes, \$900,000.

BUREAU OF EQUIPMENT AND RECRUITING.

For equipment of vessels.—For coal for steamers' use, including expenses of transportation, storage, labor; hemp and other materials for the manufacture of rope; wire-rope, hides, cordage, canvas, leather, iron, cables,

anchors, furniture, galleys and hose; and for the payment of labor in equipping vessels, and manufacture of articles in the navy-yards pertaining to this bureau, \$1,500,000.

Civil establishment at the Navy-yard, Kittery.—For clerk in equipment office, \$1,400; for store clerk, \$1,140; and for time clerk, \$900; in all, \$3,440.

At the Navy-yard, Boston.—For superintendent of rope-walk, \$1,900; clerk to same, \$1,200; clerk in equipment office, \$1,500; for two store and time clerks, at \$1,200 each; in all, \$7,000.

At the Navy-yard, Philadelphia.—For clerk in equipment office, \$1,400; for one store and one time clerk, at \$1,200 each; in all, \$3,800.

At the Navy-yard, Washington.—For clerk in equipment office, \$1,500; and for one store and one time clerk, one at \$1,400, one \$1,200; in all, \$4,100.

At the Navy-yard, Brooklyn, New York.—For clerk in equipment office, \$1,500; and for one store and one time clerk, at \$1,200 each; in all, \$3,900.

At the Navy-yard, Norfolk.—For clerk in equipment office, \$1,400; for store clerk, \$1,140; and for time clerk, \$900; in all, \$3,440.

At the Navy-yard, Pensacola.—For equipment office clerk, \$1,300, and for the store clerk, \$1,200; in all, \$2,500.

At the Navy-yard, Mare Island.—For clerk in equipment office, \$1,500; for store clerk, \$1,400; and for time clerk, \$1,200; in all, \$4,100.

For contingent expenses of Bureau of Equipment and Recruiting, viz.: For freight and transportation of stores, transportation of enlisted men, mileage to honorably discharged men, printing, postage, advertising, telegraphing, stationery, apprehension of deserters, assistance to vessels in distress, \$125,000.

BUREAU OF NAVIGATION.

For foreign and local pilotage and towage of ships of war, \$50,000.

For services and materials in correcting compasses on board ship, and for adjusting and testing compasses on shore, \$3,000.

For nautical and astronomical instruments, nautical books, maps, and charts, and sailing directions, and repairs of nautical instruments for ships of war, \$10,000.

For books for libraries for ships of war, \$3,000.

For Navy signals and apparatus, namely, signal-lights, lanterns, and rockets, including running lights, drawings, and engravings for signal books, \$6,000.

For compass fittings, including binnacles, pedestals, tripods, and other appendages of ships' compasses, to be made in the yards, \$5,000.

For logs and other appliances for measuring the ship's way, leads, and other appliances for sounding, \$3,000.

For lanterns and lamps and their appendages for general use on board ship, including those for the cabin, ward-room, and stateroom; for the holds and spirit room, for decks and quartermasters' use, \$6,000.

For bunting and other materials for flags, and making and repairing flags of all kinds, \$3,000.

For oil for ships of war other than that used for the engineer department, candles, when used as a substitute for oil in running lights, for chimneys and wick and soap used in navigation department, \$40,000.

For stationery for commanders and navigators of vessels of war, \$5,000.

For musical instruments and music for vessels of war, \$1,000.

For preparing and publishing maps, charts, nautical books, and other hydrographic information, \$20,000.

For steering signals and indicators, and for speaking tubes and gongs, for signal communication on board ships of war, \$2,500.

For expenses of Nautical Almanac:

For pay of computers and clerk for compiling the Nautical Almanac, \$13,500.

For labor, stationery, boxes, expresses, and miscellaneous items, \$1,500.

For expenses of Naval Observatory, viz.:

For pay of one clerk, \$1,500.

For three aids or assistant observers, \$4,000.

For reglazing object-glass of the great transit circle, \$800.

For wages of one instrument maker, one messenger, three watchmen, and one porter; for keeping grounds in order and repairs to buildings; for fuel, light, and office furniture, and for stationery, chemicals for batteries, postage, and freight, and all other contingent expenses, \$13,500.

Civil establishment.—For pay of writers and laborers, and for purposes incidental to the support of the civil establishment under this bureau at the several Navy-yards, \$12,000.

For contingent expenses of the Bureau of Navigation; freight and transportation of navigation materials; instruments, books, and stores; postage and telegraphing on public business; advertising for proposals; packing-boxes and materials; blank books, forms, and stationery at navigation offices, \$6,000.

BUREAU OF ORDNANCE.

For ten fifteen-inch guns, needed for the battery of the *Colossus*, and to meet contingencies, \$70,000.

For gunpowder, \$100,000.

For fuel and materials necessary in carrying on the mechanical branches of the ordnance department at the Navy-yards and stations, \$75,000.

For labor at Navy-yards, \$200,000.

For repairs to ordnance buildings, magazines, gun parks, machinery, boats, \$15,000.

For miscellaneous items, freight, \$20,000.

For experiments in ordnance, \$8,000.

For expenses of the torpedo corps, including, viz.: the purchase and manufacture of gunpowder, nitro-glycerine, gun-cotton; purchase and manufacture of electrical machines, galvanic batteries, wire; purchase of copper, wood, iron, and other materials used in the manufacture of torpedoes, with work on the same; construction of torpedo boats, purchase of coffer works, or hulks, and contingent expenses; labor, including one chemist, at

\$2,000, one foreman machinist, at \$1,565, and clerk hire; in all, \$60,000, \$10,000 of which may be expended, in the discretion of the Secretary of the Navy, for the payment of services heretofore rendered in the invention and application of torpedoes.

Civil establishment.—For pay of the superintendents and the civil establishment of the several Navy-yards under this bureau, \$15,000.

For contingent expenses of the ordnance service of the Navy, \$1,000.

BUREAU OF CONSTRUCTION AND REPAIR.

For preservation of vessels on the stocks and in ordinary; purchase of materials and stores of all kinds; labor in Navy-yards and on foreign stations; preservation of material; purchase of tools; wear, tear, and repair of vessels afloat; discharge of liabilities, and general maintenance of the Navy, as follows:

For expenses of receiving ships, \$50,000.

For preservation of iron-clad vessels, \$150,000.

For coast defence and practice vessels, \$80,000.

For tools and machinery in Navy-yards, \$100,000.

For sheds over timber, and over ships, \$100,000.

For repairs of vessels abroad, \$250,000.

For transportation, \$50,000.

For materials by contract, \$1,000,000.

For materials by purchase, \$250,000.

For labor in Navy-yards and on foreign stations, \$2,000,000.

For purchase and preservation of timber and general maintenance of the Navy, \$800,000.

To enable the Secretary of the Navy to discharge liabilities provided for by contracts made previous to March 4, 1869, \$515,960 92, or so much thereof as may be necessary: *Provided*, That before paying the claim of the Corlies Steam Engine Company, the Secretary of the Navy shall cause a re-examination of said claim to be made by the law officers of the Navy Department, and two competent engineers to be detailed for that purpose, who shall deduct from the contract price with said steam engine company whatever sum it would have cost said company to have completed their said contract.

Civil establishment at the Navy-yard, Kittery.—For assistant naval constructor, \$2,000; clerk of storehouses, \$1,500; inspector of timber, draughtsman, clerk to naval constructor, time clerk, and superintendent of floating dock, at \$1,400 each; \$10,500.

At the Navy-yard, Boston.—For assistant naval constructor, \$2,000; clerk to naval constructor, inspector of timber, and time clerk, at \$1,500 each; draughtsman to naval constructor, \$1,400; second clerk to naval constructor, and clerk of storehouses, at \$1,200 each; \$10,300.

At the Navy-yard, Brooklyn, New York.—For assistant naval constructor, \$2,000; draughtsman to naval constructor, \$1,400; clerk to naval constructor, inspector of timber, and time clerk, at \$1,500 each; second clerk to naval constructor, and clerk of storehouses, at \$1,200 each; \$10,300.

At the Navy-yard, Philadelphia.—For assistant naval constructor, \$2,000; clerk of storehouses, \$1,500; inspector of timber, draughtsman for naval constructor, clerk to naval constructor, time clerk, and superintendent of floating dock, at \$1,400 each; in all, \$10,500.

At the Navy-yard, Washington.—For assistant naval constructor, \$2,000; clerk of storehouses, \$1,400; inspector of timber, clerk to naval constructor, and time clerk, at \$1,200 each; in all, \$7,000.

At the Navy-yard, Norfolk.—For assistant naval constructor, \$2,000; draughtsman to naval constructor, and clerk of storehouses, at \$1,400 each, and time clerk, \$1,200; in all, \$6,000.

At the Navy-yard, Pensacola.—For clerk of storehouses, \$1,200.

At the Navy-yard, Mare Island.—For assistant naval constructor, \$2,000; draughtsman to naval constructor, \$1,400; inspector of timber, clerk of storehouses, clerk to naval constructor, superintendent of floating dock, and time clerk, at \$1,500 each; \$10,900.

BUREAU OF STEAM ENGINEERING.

For repairs of machinery of steamers, boilers, instruments, tools, labor, transportation, materials, stores, \$1,000,000: *Provided*, That no part of this appropriation shall be expended on account of naval engines contracted for during the war.

Civil establishment at the Navy-yard, Kittery.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk, at \$1,200; in all, \$5,600.

At the Navy-yard, Boston.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk, at \$1,200; \$5,600.

At the Navy-yard, New York.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk at \$1,200; \$5,600.

At the Navy-yard, Philadelphia.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk, at \$1,200; in all, \$5,600.

At the Navy-yard, Washington.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk, at \$1,200; in all, \$5,600.

At the Navy-yard, Norfolk.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk, at \$1,200; in all, \$5,600.

At the Navy-yard, Pensacola.—For clerk of storehouses, \$1,200.

At the Navy-yard, Mare Island.—For draughtsman, \$1,600; clerk to chief engineer, and store clerk, at \$1,400 each; and time clerk, at \$1,200; in all, \$5,600.

BUREAU OF PROVISIONS AND CLOTHING.

For provisions for the officers, seamen, and marines, including commutation of the spirit ration, and water for ships, \$781,050.

For pay of the civil establishment at the several Navy-yards under this bureau:

At Navy-yard, Boston.—Two writers, at \$1,017 25 each; in all, \$2,034 50.

At the Navy-yard, New York.—Two writers, at

\$1,017 25 each; assistant inspector of provisions and clothing, \$1,878; one writer to inspector of provisions and clothing, \$1,017 25; assistant superintendent of mills, \$939; in all, \$5,868 75.

At the Navy-yard, Philadelphia.—Two writers, at \$1,017 25 each; in all, \$2,034 50.

At the Navy-yard, Washington.—Writer, \$1,017 25; in all, \$1,017 25.

At the Navy-yard, Norfolk.—Writer, \$1,017 25; in all, \$1,017 25.

At the Navy-yard, Mare Island.—Two writers, first at \$1,017 25, and second at \$1,295 50; in all, \$2,312 75.

At the Naval Asylum, Philadelphia.—Paymaster's assistant at Naval Asylum, \$1,000.

For contingent expenses: For freight and transportation to foreign and home stations; candles, fuel; interior alterations and fixtures in inspection buildings; tools and repairing same at eight inspections; special watchmen in eight inspections; books and blanks; stationery; telegrams; postages and express charges; tolls, ferriages, and car-tickets; ice; and incidental labor not chargeable to other appropriations, \$75,000.

BUREAU OF MEDICINE AND SURGERY.

For support of the medical department, for surgeons' necessaries for vessels in commission, Navy-yards, naval stations, marine corps, coast survey, not including the families of officers on shore stations, \$51,000.

For necessary repairs of naval laboratory, hospitals, and appendages, including roads, wharves, out-houses, steam heating apparatus, sidewalks, fences, gardens, and farms, plumbers' and masons' work, painting, glazing, and outfits of hospitals at Annapolis and Mare Island, when completed, \$40,000.

For pay of civil establishment under this bureau at the several Navy hospitals and Navy-yards, \$50,000.

For contingencies, \$30,000.

NAVAL ACADEMY.

For pay of professors and others: Four professors, viz.: of French, of Spanish, one of chemistry, and of ethics and English studies, at \$1,800 each, \$7,200; nineteen [eighteen] assistant professors, viz.: five of French, two of Spanish, three of ethics and English studies, three of mathematics, one of astronomy, navigation, one of natural and experimental philosophy, and three of drawing, at \$1,400 each, \$25,200; sword-master at \$1,200, and two assistants at \$1,000 each, \$3,200; boxing-master and gymnast, \$1,200; assistant librarian and secretary, at \$1,400 each, \$2,800; three clerks to superintendent, one at \$1,200, one at \$1,000, and one at \$800, \$3,000; clerk to commandant of midshipmen, \$1,000; two clerks to paymaster, one at \$1,000 and one at \$600, \$1,600; commissary at \$288; messenger to superintendent, at \$580, and cook at \$325 50, \$1,193 50; armorer, at \$529 50; quarter gunner at \$409 50, and gunner's mate at \$469 50, \$1,408 50; coxswain, at \$469 50, and three seamen in departments of seamanship, at \$349 50 each, \$1,518; band-master, at \$528, and eighteen first-class musicians, at \$348 each, \$6,792; seven second-class musicians, at \$300 each, and two drummers and one fifer (first-class) at \$348 each, \$3,144; in all, \$53,856.

For pay of one captain of the watch, \$912 50.

Four watchmen, at \$2 25 per day each.

Foreman at the gas and steam-heating works, at \$4 per day; ten attendants at the gas and steam-heating works at academy and school ships, one at \$3 25 per day, three at \$3 per day each, and six at \$2 50 per day each; three joiners, two painters, and two masons, at \$3 50 per day each; tinner, gas-fitter, and blacksmith, at \$3 per day each; making in all, \$27,831 25.

For pay of one mechanic at work-shop, at \$2 25 per day.

Master laborer to keep public grounds in order, at \$2 28 per day; fourteen laborers, three at \$2 per day, and eleven at \$1 75 per day; laborer to superintendent, \$2 28 per day; four attendants at recitation rooms, library, chapel, and offices, at \$20 per month each; twenty servants to keep in order midshipmen's quarters, and public buildings, at \$20 per month each; making in all \$17,462 75.

For pay in department of steam engineering, one machinist at \$3 50 per day, and one machinist at \$3 per day; one blacksmith, one boiler-maker, one pattern-maker, and one moulder, at \$3 per day each; and two laborers at \$1 75 per day each; making in all \$8,760.

For repairs and improvements of public buildings, \$10,000.

For contingent expenses:

For material for heating and lighting the academy and school-ships' quarters, \$20,000.

For purchase of books for the library, \$2,000.

For stationery, blank books, maps, and models, \$3,500.

For expenses of the board of visitors, \$2,000.

For postage, \$750.

For furniture and fixtures for public buildings, \$2,000.

For expenses in the astronomical and philosophical department, \$500.

For the purchase of steam machinery, steam pipe and fixtures, rent of buildings, freight, cartage, water, musical instruments, uniforms for band, telegraphing, and repairs of all kinds, and incidental labor not applicable to any other appropriation, \$35,000.

For rent of quarters for foreman of gas and steam-heating works, \$180.

For engineers' stores, in department of steam engineering, \$500.

For material for repair of steam machinery, \$1,000.

MARINE CORPS.

For pay and subsistence of officers of the Marine Corps, and for pay of non-commissioned officers, musicians, privates, and others of the corps, \$731,467 17.

For provisions, \$135,991 70.

For clothing, \$50,000.

For fuel, \$26,169.

For military stores, viz.: For pay of mechanics, repair of arms, purchase of accoutrements, ordnance stores, flags, drums, fifes, and other instruments, \$7,000.

For transportation of officers and their servants, and troops, and for expenses of recruiting, \$15,000.

For repairs of barracks, and rent of offices, where there are no public buildings, \$10,000.

For contingencies, viz.: Freight, ferriage, toll, cartage, wharfage, purchase and repair of boats; compensation of judge advocates; per diem for attending courts-martial and courts of inquiry, and for constant labor; house rent in lieu of quarters and commutation for quarters to officers on ship-board; burial of deceased marines; printing, stationery, postage, telegraphing; apprehension of deserters; oil, candles, gas; repairs of gas and water fixtures; water rent, forage, straw, barrack furniture; furniture for officers' quarters; bed sacks, wrapping paper, oil cloth, crash, rope, twine, spades, shovels, axes, picks, carpenters' tools; keep of a horse for the messenger; repairs to fire engines, purchase and repair of engine hose; purchase of lumber for benches, mess tables; banks; repairs to public carryall; purchase and repair of harness; purchase and repair of handcarts and wheelbarrows; scavenging; purchase and repair of galleys; cooking stoves, ranges; stoves where there are no grates; gravel for parade grounds; repair of pumps; furniture for staff and commanding officers' offices; brushes, brooms, buckets, paving, and for other purposes, \$50,000.

SEC. 2. That so much of the first section of the act of March 3, 1853, entitled "An act making appropriations for the naval service of the year ending the 30th of June, 1854," as provides that "the pay of a purser, when attached to and doing duty at the naval station of California, shall be \$4,000 per annum; and he shall be allowed a clerk at a compensation not exceeding \$2,000 per annum," is hereby repealed.

SEC. 3. That from and after the 30th day of June, 1870, the annual pay of the officers of the Navy on the active list shall be as follows:

The Admiral, \$13,000.
The Vice-Admiral, when at sea, \$9,000; on shore duty, \$8,000; on leave or waiting orders, \$6,000.

Rear-admirals, when at sea, \$6,000; on shore duty, \$5,000; on leave or waiting orders, \$4,000.

Commodores, when at sea, \$5,000; on shore duty, \$4,000; on leave or waiting orders, \$3,000.

Captains, when at sea, \$4,500; on shore duty, \$3,500; on leave or waiting orders, \$2,800.

Commanders, when at sea, \$3,500; on shore duty, \$3,000; on leave or waiting orders, \$2,300.

Lieutenant-commanders, during the first four years after date of commission, when at sea, \$2,800; on shore duty, \$2,400; on leave or waiting orders, \$2,000; after four years from such date, when at sea, \$3,000; on shore duty, \$2,600; on leave or waiting orders, \$2,200.

Lieutenants, during the first five years after date of commission, when at sea, \$2,400; on shore duty, \$2,000; on leave or waiting orders, \$1,600; after five years from such date, when at sea, \$2,600; on shore duty, \$2,200; on leave or waiting orders, \$1,800.

Masters, during the first five years after date of commission, when at sea, \$1,800; on shore duty, \$1,500; on leave or waiting orders, \$1,200; after five years from such date, when at sea, \$2,000; on shore duty, \$1,700; on leave or waiting orders, \$1,400.

Ensigns, during the first five years after date of commission, when at sea, \$1,200; on shore duty, \$1,000; on leave or waiting orders, \$800; after five years from such date, when at sea, \$1,400; on shore duty, \$1,200; on leave or waiting orders, \$1,000.

Midshipmen, after graduation, when at sea, \$1,000; on shore duty, \$800; on leave or waiting orders, \$600.

Mates, when at sea, \$900; on shore duty, \$700; on leave or waiting orders, \$500.

Fleet surgeons, fleet paymasters, and fleet engineers, \$4,400.

Surgeons, paymasters, and chief engineers, during the first five years after date of commission, when at sea, \$2,800; on shore duty, \$2,400; on leave or waiting orders, \$2,000; during the second five years after such date, when at sea, \$3,200; on shore duty, \$2,800; on leave or waiting orders, \$2,400; during the third five years after such date, when at sea, \$3,500; on shore duty, \$3,000; on leave or waiting orders, \$2,600; during the fourth five years after such date, when at sea, \$3,700; on shore duty, \$3,200; on leave or waiting orders, \$2,800; after twenty years from such date, when at sea, \$4,200; on shore duty, \$4,000; on leave or waiting orders, \$3,000.

Passed assistant surgeons, passed assistant paymasters, and first assistant engineers, during the first five years after date of appointment, when at sea, \$2,000; on shore duty, \$1,800; on leave or waiting orders, \$1,500; after five years from such date, when at sea, \$2,200; on shore duty, \$2,000; on leave or waiting orders, \$1,700.

Assistant surgeons, assistant paymasters, and second assistant engineers, during the first five years after date of appointment, when at sea, \$1,700; on shore duty, \$1,400; on leave or waiting orders, \$1,000; after five years from such date, when at sea, \$1,900; on shore duty, \$1,600; on leave or waiting orders, \$1,200.

Naval constructors, during the first five years after date of appointment, when on duty, \$3,200; on leave or waiting orders, \$2,200; during the second five years after such date, when on duty, \$3,400; on leave or waiting orders, \$2,400; during the third five years after such date, when on duty, \$3,700; on leave or waiting orders, \$2,700; during the fourth five years after such date, when on duty, \$4,000; on leave or waiting orders, \$3,000; after twenty years from such date, when on duty, \$4,200; on leave or waiting orders, \$3,200.

Assistant naval constructors, during the first four years after date of appointment, when on duty, \$3,000; on leave or waiting orders, \$1,500; during the second four years after such date, when on duty, \$3,200; on leave or waiting orders, \$1,700; after eight years from such date, when on duty, \$3,600; on leave or waiting orders, \$1,900.

Chaplains, during the first five years after date of commission, when at sea, \$2,500; on shore duty, \$2,000; on leave or waiting orders, \$1,600; after five years from such date, when at sea, \$2,800; on shore duty, \$2,300; on leave or waiting orders, \$1,900.

Professors of mathematics and civil engineers, during the first five years after date of appointment, when on duty, \$2,400; on leave or waiting orders, \$1,500; during the second five years after such date, when on duty, \$2,700; on leave or waiting orders, \$1,800; during the third five years after such date, when on duty, \$3,000; on leave or waiting orders, \$2,100; after fifteen years from such date, when on duty, \$3,500; on leave or waiting orders, \$2,600.

Boatswains, gunners, carpenters, and sail-makers, during the first three years after date of appointment, when at sea, \$1,300; on shore duty, \$900; on leave or waiting orders, \$700; during the second three years after such date, when at sea, \$1,300; on shore duty, \$1,000; on leave or waiting orders, \$800; during the third three years after such date, when at sea, \$1,400; on shore duty, \$1,100; on leave or waiting orders, \$900; during the fourth three years after such date, when at sea, \$1,600; on shore duty, \$1,300; on leave or waiting orders, \$1,000; after twelve years from such date, when at sea, \$1,800; on shore duty, \$1,600; on leave or waiting orders, \$1,200.

Secretaries to Admiral and Vice-Admiral, each \$2,500; to commanders of squadrons, \$2,000.

Secretary of the Naval Academy, \$1,800.

Clerks to commanders of squadrons and commanders of vessels, \$750; first clerks to commandants of Navy-yards, \$1,500; second clerks to commandants of Navy-yards, \$1,200; clerk to commandant of Navy-yard, Mare Island, \$1,800; clerks to commandants of naval stations, \$1,500; clerks to paymasters at Navy-yards, Boston, New York, Philadelphia, and Washington, \$1,600; to paymasters at Navy-yards, Kittery, Norfolk, and Pensacola, \$1,400; to paymaster at Navy-yard, Mare Island, \$1,800; to paymasters at other stations, \$1,300; to paymasters of receiving ships at Boston, New York, and Philadelphia, \$1,600; to paymaster of receiving ship at Mare Island, \$1,800; to paymasters on other receiving ships, on vessels of the first rate, at the Naval Academy, and at the Naval Asylum, \$1,300; to fleet paymasters and paymasters of vessels of the second rate, \$1,100; to paymasters of vessels of the third rate, and supply vessels and store ships, \$1,000; to inspectors in charge of provisions and clothing at Navy-yards, Boston, New York, Philadelphia, and Washington, \$1,600; to inspectors in like charge at other inspections, \$1,300.

SEC. 4. That the pay prescribed in the next preceding section shall be the full and entire compensation of the several officers therein named, and no additional allowance shall be made in favor of any of said officers on any account whatever, and all laws or parts of laws authorizing any such allowance shall, on the 1st day of July, 1870, be repealed; but this shall not be construed as repealing existing laws allowing rations and travelling expenses to officers; and their travelling expenses in foreign countries shall be considered to include such expenses of transportation of baggage as were necessarily incurred; but no charge for transportation of baggage in connection with travel in the United States shall be allowed. And from and after the 30th day of June, 1870, so much of the fourth section of the act approved July 14, 1863, "making appropriations for the naval service for the year ending June 30, 1863, and for other purposes," as allows to persons in the naval service five cents per day in lieu of the spirit ration, is hereby repealed; and from and after that day thirty cents shall in all cases be deemed the commutation price of the navy ration.

SEC. 5. That from and after the 30th day of June, 1870, the pay of all officers of the Navy now on or hereafter placed on the retired list shall, when not on active duty, be equal to one-half of the highest pay prescribed by this act for officers on the active list whose grade corresponds to the grade held by such retired officers respectively at the time of such retirement, and no officer, heretofore or hereafter promoted upon the retired list, shall, in consequence of such promotion, be entitled to any increase of pay. And retired third assistant engineers shall continue to receive the same rate of pay they have received up to the time of the passage of this act; and the grade of third assistant engineer on the active list is hereby abolished.

SEC. 6. That no officer of the Navy shall, because of misconduct, be placed on the retired list; but he shall be brought to trial by court-martial for such misconduct; nor shall any lieutenant-commander, lieutenant, master, ensign, midshipman, passed assistant surgeon, passed assistant paymaster, first assistant engineer, assistant surgeon, assistant paymaster, or second assistant engineer be placed on the retired list, except on account of physical or mental disability.

SEC. 7. That the pay of an officer of the Navy, upon his original entry into the service, except where he is required to give an official bond, shall commence upon the date of his acceptance of his appointment; but where he is required to give such bond, his pay shall commence upon the date of the approval of his bond by the proper authority; that hereafter the increased pay of a promoted officer shall commence from the date he is to take rank as stated in his commission; but if an officer of a class subject to examination before promotion shall be absent on duty, and by reason of such absence, or of other cause not involving fault on his part, shall not be examined at the time required by law or regulation, and shall afterward be examined and found qualified, the increased rate of pay to which his promotion would entitle him shall commence from the date when he would have been entitled to it had he been examined and found qualified at the time so required by law or regulation; and this rule shall apply to any cases of this description which may have heretofore occurred. And in every such case the period of service of the party, in the grade to which he was promoted, shall, in reference to the rate of his pay, be considered to have commenced from the date when he was so entitled to take rank.

SEC. 8. That any officer of the Navy on the active list below the grade of commander, who, upon examination for promotion, shall not be found professionally qualified, shall be suspended from promotion for one

year, with corresponding loss of date, when he shall be re-examined, and in case of his failure upon such re-examination, he shall be dropped from the service.

SEC. 9. That no promotion to the grade of lieutenant-commander on the active list shall be made until the number in said grade is reduced below eighty; and thereafter eighty shall be the number allowed by law on said list; and when the number of lieutenant-commanders shall have been so reduced, section five of the "Act to define the number and regulate the appointment of officers in the Navy, and for other purposes," approved July 25, 1866, shall stand repealed. And as the number of lieutenant-commanders is reduced, the number of lieutenants shall be increased, until the number in the grade of lieutenants on the active list shall be 280, which shall thereafter be the number of lieutenants allowed by law on said list.

SEC. 10. That the number of masters and ensigns on the active list authorized by law is hereby fixed and established at one hundred in each grade; and ensigns shall hereafter be steamer officers unless assigned to duty as watch and division officers; but this shall not be construed as vacating the commission of any master or ensign now in the service.

SEC. 11. That, until the number of passed assistant paymasters shall have been reduced below thirty, there shall be no promotion to that grade, nor any appointment to the grade of assistant paymaster; and after such reduction shall have taken place, the number in each of said grades shall not exceed thirty in the former and twenty in the latter.

SEC. 12. That the students in the Naval Academy shall hereafter be styled cadet midshipmen; and they shall be selected and appointed as prescribed in the eighth section of the "Act to amend certain acts in relation to the Navy," passed March 2, 1867, and shall be subject to the laws applicable to the students at said academy, and receive the pay therein prescribed; but this shall not be construed to authorize the appointment of cadet midshipmen from among boys enlisted in the Navy. When cadet midshipmen shall have passed successfully the graduating examination at said academy they shall receive appointments as midshipmen, ranking according to merit, and may be promoted to the grade of ensign as vacancies in the number allowed by law in that grade may occur.

SEC. 13. That all acts or parts of acts authorizing the appointment of temporary acting officers in the Navy be, and the same are hereby, repealed, except as to assistant surgeons.

SEC. 14. That summary courts-martial may be ordered upon petty officers and persons of inferior ratings by the commandants of Navy-yards, naval stations, and marine barracks, in the cases, under the regulations, and with the effect provided for and specified in the "Act to provide a more efficient discipline for the Navy," approved March 2, 1855.

SEC. 15. That the "Joint resolution to facilitate the settlement of accounts of disbursing officers," approved March 2, 1867, shall not be construed to apply to disbursing officers of the Navy; but such officers shall render their accounts as the same were rendered before the passage of said joint resolution.

SEC. 16. That the chiefs of bureaus in the Navy Department shall be entitled to the pay of commodores on shore duty, and, if retired from said office by reason of age or length of service, to the retired pay of that grade.

SEC. 17. That expenses incurred by any officer of the Navy for medicines and medical attendance shall not be allowed unless they were incurred when he was on duty, and the medicines could not have been obtained from naval supplies, or the attendance of a naval medical officer could not have been had; nor shall any funeral expenses of a naval officer who died in the United States, or expenses for travel to attend the funeral of an officer who died there, be allowed; but when an officer on duty dies in a foreign country, the expenses of his funeral, not exceeding his sea-pay for one month, shall be defrayed by the Government, and paid by the paymaster upon whose books the name of such officer was borne for pay.

SEC. 18. That the superintendent of the Naval Observatory be, and he is hereby, authorized to contract for the construction of a refracting telescope of the largest size, of American manufacture, at a cost not exceeding \$50,000; and the sum of \$10,000 is hereby appropriated in part payment therefor.

SEC. 19. That all acts or parts of acts inconsistent with this act are hereby repealed.

Approved July 15, 1870.

LETTERS IN THE NEW YORK POST-OFFICE.

The following is a list of letters remaining in the New York Post-office on the dates given. These letters are retained in the New York Office for one month from date, after which they are sent to the Dead-Letter Office, Washington.

ARMY.

JULY 28.

Brown, S. F., Captain.	Hooker, Joseph, General.
Bulow, L., Sergeant.	Kelly, F. G., Captain-2.
Butler, J. G., Colonel.	Lewis, C. H., Captain.
Cross, O., Brigadier-General-4.	Malott, Peter, Colonel.
Drew, F. A., Captain.	Melvin, W. B., Captain.
Franklin, T., Captain.	Mott, Colonel.
Fulton, H., Captain.	Ostrum, J. D., Captain.
	Spears, S. P., General.

AUGUST 1.

Andrews, B. H., Captain.	Looney, D., Colonel-2.
Grafton, Edw. C., Captain.	Marvin, S. E., Brigadier-General.
Green, E. M., Colonel.	Platt, D., Colo. el.
Gosson, John J., Major.	Prince, H., General.
Hammond, Captain.	Sommer, Geo., Captain.
La Motte, General.	Webber, J. F., Captain.
	Young, C. H., General.

Letters have been received at this office for Captain R. W. Shufeldt, U. S. Navy; James F. Farrell, Admiral's Clerk of North Atlantic Fleet.

HOSPITAL Steward Julius Huthstainer, U. S. Army, has been ordered to proceed from Fort Jackson, Louisiana, to Fort Pike, Louisiana, and report to the commanding officer for duty.

CORRESPONDENCE.

Our correspondents are informed that communications intended for our columns, to receive prompt attention, should invariably be addressed to THE EDITOR of the ARMY AND NAVY JOURNAL, Box 3,201, New York.

EXPLOSIVE BULLETS.

To the Editor of the Army and Navy Journal.

SIR: In your issue of the 9th inst. you had an article on what is called a new explosive missile for small arms (the proper name of it I have forgotten); and in the article referred to you speak in an unbelieving way of the stories of the rebels using some such missile. Having been a constant and interested reader of your pleasant paper since its birth, I think it right to put you right about this matter.

The enemy did use an explosive bullet for small arms. I first saw them on the 6th of May, 1862, in Williamsburg, amongst the debris of the retreating rebel army. They were quite abundant, lying loose over the ground, and in abandoned cartridge boxes, and in some that had evidently been taken off wounded men. Second, on the 6th of February, 1864, when the Army of the Potomac made the feint to employ Lee, while Mr. Butler carried out one of his brilliant military ideas, viz., liberating our prisoners at Richmond. Alex. Hays's division of the Second Corps had to take the brunt of this miserable business. A personal aid to General Hays was wounded through the left breast by one of these bullets; at least, every one, surgeons and all, pronounced it so. The entrance of the ball was in front, and the hole so made through his clothes was as round as if made with a punch, and the scar now on his breast is perfectly round. The exit of the ball, on his back, is an inch and one-quarter long, but all his clothes, shirt, vest, jacket, and all, show two separate, distinct, and disconnected slits of about equal length, two inches long. Small pieces of lead were picked off his flesh at the exit by the surgeons who dressed his wound the second day from the time he received it. This officer knew of these bullets being found at Williamsburg, and when he was wounded, he had no doubt he was wounded by one of that kind. The ones I found were of the style commonly called minie, so far as the exterior went; but by looking at it close you could see at the butt of the ball that they were divided by some sort of paper, not projecting beyond the lead. Cut them apart, and you would find, sure enough, that what looked like one ball was really two, the inner ball not so long as the outer, and the space thus made at the point of the ball was filled with powder (supposed to be; at least, it had that appearance). The paper that was noticed on looking close at the butt extended down between the balls to this powder. I suppose this paper was the same material as the fuse of Chinese crackers, and was ignited by the powder in the firearm. When the fire from the paper reached the powder in the little chamber at the point of the bullet, it exploded it. It was always said in the Army that this was English ammunition, and as only a limited amount of our enemy's ammunition was procured from this source, it is probable that is the reason more was not known of it.

NEW BRIGHTON, Beaver Co., Pa.

THE ASSASSINATION OF LIEUT.-COL. BUEL.

To the Editor of the Army and Navy Journal.

SIR: The usual uneventful quietness of our post (Fort Leavenworth, Kansas) was most rudely and terribly disturbed on the night of the 23d inst., by the foul and dastardly murder of Brevet Lieutenant-Colonel David H. Buel, captain U. S. Ordnance Corps, commanding Leavenworth arsenal. The facts, as far as publicly known, are that on the evening of the 23d inst. Colonel Buel, with his wife and their two interesting children, went from his home at the arsenal to the quarters of General Sturgis, colonel Seventh regiment U. S. Cavalry, commanding the post, for the purpose of attending a charitable fair, held there that evening by the children of the post, in aid of a poor blind woman and her children in Leavenworth City. After participating in the pleasures of this occasion, and evincing his happy and generous impulses by dancing with the children and by liberal purchases of the various articles sold at the fair, Colonel Buel took his departure a little time before the other guests, Mrs. Buel being quite an invalid. They reached the arsenal gate, on their return, about 11 o'clock p. m. It was opened by the corporal of the guard, and they were met at the gate opening into the grounds in which the quarters stand by an attendant, who upon their alighting from the carriage took the vehicle away as usual, and the colonel assisted his wife toward the house in his usual manner, one rendered necessary by her disease, by supporting her with his right arm around her waist, the children going in advance. They had taken about a dozen steps inside the gate, when the report of a gun was heard, and they both instantly fell to the ground together. The colonel had been shot in the back by a fiendish assassin. The ball entered his back just to the left of the spinal column, passed through it breaking the spinal cord, passed through the body, coming out on the right side, passed through the elbow of the right arm with which he had been supporting his wife, and buried itself in the ground a short distance from the walk. Mrs. Buel was providentially unhurt, although so shocked by the almost contact of the ball that she fell simultaneously with her husband. He died seemingly without pain in a few moments after falling. His head was supported by his wife, and she received his dying words of love, and was with difficulty separated from his corpse. In the moment of falling he exclaimed, "Who shot me? Tell the corporal to bring me a rifle;" and a moment or two after, "Georgie, I am dying; good-bye," adding a few words of affection to his wife.

Thus suddenly passed from his earthly home and labors a Christian gentleman and noble soldier. Colonel

Buel was almost perfect as an officer, a gentleman, and a Christian; he was a loyal devoted husband, a kind father, a good and generous neighbor, a truly brave and faithful soldier. His daily life was a pure, moral and religious one, and he died as truly in the faithful discharge of duty in the service of his country as if he had fallen in the fore-front of battle; for he was undoubtedly assassinated by one or more of the soldiers of his command, simply because of his proper, brave, and laudable efforts to perform his sworn duty as an officer, in the preservation of discipline, and in the enforcement of duty in his command. The fiendish assassin made his escape and is yet at large. He is not certainly known, but circumstantial evidence is so strong as to warrant the belief that the horrible deed was perpetrated by a private soldier of the Ordnance Corps, named J. M. Malone, who deserted from Colonel Buel's command a few days before the murder was committed. Some of the facts leading to the belief of this man's guilt are these. He was a drunken, worthless soldier, with a reported murderous character. For absence without leave, he had been given as a punishment by Colonel Buel a not severe task, and willfully failing to perform it, he was confined some time in the guard-house. Upon his release he threatened to take Colonel Buel's life, and made up his mind to desert. The same day he went to Colonel Buel's quarters with the supposed purpose of killing him, but whatever his intention may have been, he failed to carry it out; for Colonel Buel, who had been warned that the man cherished animosity towards him, met him with a brave man's steady, stern look, before which he quailed and slunk away without a word having been spoken. That same evening, the 19th inst., he went to his washroom's and told her that "he was going to desert, but that he would not leave the place till he had killed Colonel Buel; that he would watch night and day until he shot him dead." The woman immediately went to Colonel Buel and told him this, but he did not deem it worthy of notice. That night Malone deserted, but was seen by a competent witness two days afterwards, near the sutler's store, in citizen's clothes, with a revolver strapped to his side; and he stated that he was going away, but that he would kill Colonel Buel before he left. This, it seems, was not known to Colonel Buel; for after Malone's desertion the colonel attached sufficient importance to his threats to inquire if Malone had been seen since his desertion, but could get no information about him. It is further known that Malone had to sell or pawn his revolver for money, and that he was seen at the post on the night of the murder; also that the ball which killed Colonel Buel was found in the ground a short distance from where he fell; that it was a Springfield rifle ball; the copper shell of the cartridge was found near the second gate in front of Colonel Buel's quarters, with a metallic ball-cartridge of the same kind lying near it. All of which shows that whoever fired the shot used a Springfield rifled musket; that he was inside of the gate, concealed in the shrubbery within a few feet of the walk; that he ran through the shrubbery, after firing the fatal shot, to and through the second gate, carrying the gun with him; that he threw out the shell of the exploded cartridge, and reloaded the gun to be prepared for resistance; and as a gun of this description with some cartridges was taken that night from the barrack room of the arsenal, it is further presumed that Malone, who was of course familiar with the room and all the grounds, took this method of arming himself for the bloody deed.

There are various facts which lead to the belief that Malone, or whoever did the murder, had one or more accomplices. The coroner's jury are still engaged in the investigation, and they may bring more facts to light. In the meanwhile, the authorities, civil and military, are doing all they can to detect and secure the murderer. The officers of the garrison have guaranteed a reward of \$500 for the arrest, or information that will lead to the arrest, of the assassin, and this will probably be increased to \$1,000 by the War Department.

The funeral took place on Sunday, the 24th inst., at ten o'clock a. m., with the honors of war, and our little community is left in a state of the greatest excitement.

Since the foregoing was written, the murderer of Colonel Buel has been captured, shot through the body in resisting capture, and died in the guard-house, at this post, on the night of the 26th inst., after suffering fearful agonies for nearly a day. He proved to be Private John M. Malone, U. S. Ordnance Corps, as was supposed, and before death he made full confession of his guilt, and seemed penitent for his crime. He was visited in his cell by the widow of Colonel Buel, and assured of her forgiveness. He was also, at his own request, visited in his cell by a minister, the Rev. Robert Browne of Leavenworth, and manifested some religious feeling. From his confession, it appears that his motive in committing the fearful deed was revenge for punishment inflicted upon him by Colonel Buel. To use his own words: "I did it for punishment he (Colonel Buel) gave me. I was excused from fatigue by the doctor, and he made me saw more wood than a well man could; it nearly killed me. I could have gotten through with a cord; I told him of it, but he didn't give me any satisfaction." Now it is known that Colonel Buel ordered him (Malone) to saw a cord of wood as punishment; this, Malone, in his confession, admits to have been a proper punishment for his offence. But he failed to saw the full cord; he sawed half of it, and covered up the other half with what he had sawed. This was discovered, and for this Colonel Buel directed that he should saw the other half cord and an additional half cord as punishment for his attempt to evade his original task; and it was for this paltry affair that Malone assassinated Colonel Buel in cold blood, probably some two weeks after, in the presence of his wife and children. This seems scarcely possible, and yet it is only too true. The guilt does not rest upon Malone singly; he would not have dreamed of such an act, had he not been aware of and influenced by that most uncalled for and unfounded sentiment of society,

outside of the Army, that soldiers are just as good as officers, and that officers must not punish soldiers unless they are prepared to take the consequences—that is, ill-will, resistance, and assassination on the part of the soldier. And it was just this sentiment, communicated to the degraded and murderous mind of Malone, that incited him to the foul murder of Colonel Buel. Out upon such maudlin, murder-breeding sentimentality! Let every man that talks of justification for the horrible murder of Colonel Buel hold his peace, for God has sternly vindicated his command, "Vengeance is mine, I will repay." The fate of Malone is a terrible example of retributive justice, for he was shot through the body like his unsuspecting victim, but suffered a thousand-fold more. Colonel Buel died an almost instant painless death, in the arms of his wife, while Malone lingered nearly a day in excruciating agony, dying in a felon's cell.

RETIRED PAY—"EACH AND EVERY."

To the Editor of the Army and Navy Journal.

SIR: I desire through your columns to call the attention of retired officers to the following extracts, and to request that all who are affected by them will appeal from the decision of the Paymaster-General to the Hon. Secretary of War, and request that their appeals be laid before the Attorney-General for his decision. The "Army Bill," published in your issue of July 30, says, in section 24:

"There shall be allowed and paid to each and every commissioned officer below the rank of brigadier-general, including chaplains and others having assimilated rank or pay, ten per centum of their current yearly pay for each and every term of five years of service. . . . Officers retired from active service shall receive seventy-five per centum of the pay of the rank upon which they are retired."

Circular No. 73 from the Paymaster-General's office, dated July 22, says in paragraph 8: "Officers retired receive three-fourths of the pay (salary and increase) to which, under this law, they would be entitled in active service, but no increase can accrue after retirement."

Now I hold that the words I have italicized in said paragraph 8 are in direct violation of the words of the law, "each and every commissioned officer," and "each and every term of five years' service."

Hoping that "each and every" retired officer will take the action herein suggested, I am yours truly,
A RETIRED OFFICER.

PRIVATE PROPERTY AT SEA.

SECRETARY Fish has addressed a letter to Baron Gerolt, the Prussian Minister in Washington, in response to the despatch from the Prussian Government, exempting all private property on the high seas from seizure. It is as follows:

DEPARTMENT OF STATE,
WASHINGTON, July 23, 1870.

SIR: I have the honor to acknowledge the receipt of your letter of the 10th instant, communicating to this Government the text of a despatch from Count Bismarck, to the effect that private property on the high seas will be exempt from seizure by the ships of his Majesty the King of Prussia, without regard to reciprocity. In compliance with the request further contained in your note, that communication has been officially made public from this Department. It is now nearly a century since the United States, through Thomas Jefferson, Benjamin Franklin, and John Adams, their plenipotentiaries, and under the guidance of the great Frederick of Prussia, entered into a treaty of amity and commerce, to be in force for ten years from its date, whereby it was agreed that if war should unhappily arise between the two contracting parties, all merchant and trading vessels employed in exchanging the products of different places, and thereby rendering the necessities, conveniences, and comforts of human life more easy to be obtained and more general, should be allowed to pass free and unmolested; and that neither of the contracting powers should grant or issue any commission to any private armed vessels empowering them to take or destroy such trading vessels, or interrupt such commerce. The Government of the United States receives with great pleasure this renewed adherence of the great and enlightened German Government to the principles temporarily established by the treaty of 1785, and since then advocated by this Government whenever an opportunity has offered.

In 1854, President Pierce, in his annual message to Congress, said: "Should the leading powers of Europe concur in proposing as a rule of international law to exempt private property upon the ocean from seizure by public armed cruisers as well as by privateers, the United States will readily meet them on that broad ground." In 1856 this Government was invited to give its adhesion to the declaration of Paris. Mr. Marcy, then Secretary of State, replied: "The President proposes to add to the first proposition in the declaration of the Congress at Paris, the following words: 'and that the private property of the subjects or citizens of a belligerent on the high seas shall be exempted from seizure by public armed vessels of the other belligerent, unless it be contraband.' Thus amended the Government of the United States will adopt it, together with the other three principles contained in that declaration." And again, in 1861, Mr. Seward renewed the offer to give the adhesion of the United States to the declaration of the Congress of Paris, and expressed a preference that the same amendment should be retained. Count Bismarck's despatch, communicated in your letter of the 10th inst., shows that North Germany is willing to recognize the principle, even without reciprocity, in the war which has now unhappily broken out between that country and France. This gives reason to hope that the Government and the people of the United States may soon be gratified by seeing it universally recognized as another restraining and humanizing influence imposed by modern civilization upon the art of war.

Accept the renewed assurance of my very high consideration.
HAMILTON FISH.

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IMPORTANT TO PARENTS AND GUARDIANS.

Officers of the Army and Navy having daughters to educate, and who wish to secure for them the advantages of a first class English and French Academy, with musical instruction unsurpassed if not unequalled in this country, and all at exceedingly moderate rates, are advised to investigate the claims of the Academy of the Visitation, at Mount de Chantal, near Wheeling, W. Va.

REFERENCES.

General Sherman, U. S. A., and lady, Washington, D. C.
Major-General George G. Meade, U. S. A., Philadelphia.
Brigadier-General Lawrence P. Graham, U. S. A., and lady, Austin, Texas.
Brigadier-General Innis N. Palmer, U. S. A., and lady, Omaha, Nebraska.
Vice-Admiral David Porter, U. S. N., Washington, D. C.
Rear-Admiral Joseph Smith, U. S. N., Washington, D. C.
Mrs. Admiral Dahlgren, Washington, D. C.

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A CAPTAIN OF INFANTRY, STATIONED IN TEXAS, is desirous of effecting a transfer into some regiment stationed North or West. Address ALCALDE, office of ARMY AND NAVY JOURNAL.

A SECOND LIEUTENANT OF INFANTRY (white regiment) will negotiate terms of transfer with a Second Lieutenant of White Cavalry. Address PEMBINA, care of ARMY AND NAVY JOURNAL.

A FIRST LIEUTENANT OF CAVALRY, NEAR THE TOP OF THE LIST, will transfer with any First Lieutenant of Infantry or Artillery, on certain conditions. Address THADEUS, care of ARMY AND NAVY JOURNAL.

TRANSFER.—A FIRST LIEUTENANT OF ARTILLERY, well up, will, for satisfactory inducements, transfer with any First Lieutenant of Cavalry or Infantry, assigned or unassigned. Address SHRAPNEL, office ARMY AND NAVY JOURNAL, stating offer.

WANTED.—BY A COMPETENT MAN, WHO HAS had thirty years' experience as a Drummer in the U. S. Army, and is now a Drum-major in it, the position of Drum-major in the N. Y. S. N. G.; has the best of references. Address DRUM-MAJOR ARMY AND NAVY JOURNAL office, until August 15, 1870, stating terms.

A SECOND LIEUTENANT OF AN OLD INFANTRY regiment (below the Sixth), ranking March, 1867, desires to transfer with a Second Lieutenant on waiting orders. Address MINNESOTA, care ARMY AND NAVY JOURNAL.

THE contest for the *America* cup, now held by the New York Yacht Club, will come off on Monday, August 8, at 10 o'clock, A. M. A flag-boat will be anchored abreast of the club house, Clifton, Staten Island, about mid channel. The yachts will anchor on an east and west line, 500 yards to the northward and westward of the flag-boat, and about 50 yards apart. In taking position in line, each yacht may select its own in the order of its arrival at the anchorage, subject to any change that the Executive Committee may deem expedient. A steam tug will be in attendance to enable the yachts to assume their proper position in line. Mainsails, foresails, and gaff topsails may be set before starting, unless otherwise ordered by the committee. The signal for starting will be one gun from the committee's steamer to prepare, and a second to start. Yachts will proceed from the anchorage to the buoy of the Southwest Spit, passing it to the west and south, and thence to the light ship, rounding it to the northward and eastward, and return over the same course, passing to the west of the flag-boat off the club house, going and returning. Going and returning, all the buoys on the west bank, viz.: Nos. 13, 11, and 9, are to be passed to the eastward. Entries will be received until Saturday, August 6, closing at ten A. M. precisely. They must be directed to the Secretary of the Club, and delivered at his office, 45 Liberty street, New York. The Executive Committee having this matter in charge are W. H. Major, Sheppard Homans, and Stuart M. Taylor. The judges are Moses H. Grinnell, W. B. Duncan, and Alex. Hamilton, Jr. The committee enjoin upon all vessels present on the occasion, whether steam or canvas, most scrupulously to avoid any interference, either directly or remotely, with any of the vessels engaged in the race, giving to all a "clear field and a wide berth," and in view of our national instinct for "fair play," that the representative vessel of the Royal Thames Yacht Club, the *Cambria*, should have no cause whatever to complain of any unfairness, or unnautical interference in this respect.

U. S. ARMY AND NAVY JOURNAL.

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Subscribers who purpose binding their volumes at the end of the year should be careful to preserve their files of the paper, as we no longer retype the paper, and are not able, therefore, to supply all of the back numbers of this volume.

The subscription price of THE ARMY AND NAVY JOURNAL is SIX DOLLARS a year, or THREE DOLLARS for six months, invariably in advance. Remittances may be made in a Post-Office money order, United States funds, or Quartersmasters', Paymasters', or other drafts which should be made payable to the order of the Proprietors, W. C. & F. P. CHURCH. Where none of these can be procured, send the money, but always in a registered letter. The registration fee has been reduced to fifteen cents, and the present registration system has been found by the postal authorities to be virtually an absolute protection against losses by mail. All postmasters are obliged to register letters whenever requested to do so.

THE only change in the position of the armies of France and Prussia, in regard to which we have any certain information, is the advance on the 2d of August of the French centre across the frontier, and the occupation of Saarbrück on Prussian territory. The French are making the most of this "great victory," and have even illuminated Metz on account of it, if the telegraphic report is true. A despatch to New York announced some days in advance of this affair that Saarbrück was not occupied in force by the Prussians, and it is evident that the French counted upon this fact. It lies so far in advance of the Prussian centre, and so far beyond any line that they could maintain without crossing the frontier, that they could not defend it except at the risk of a general engagement, for which neither party is yet prepared. Its continued possession by the French will cut the Prussians off from the advantages of a direct railroad connection along their front, which they had in the railroad running through Saarbrück from Treves to the Rhine. If Prussia intends to act on the defensive, we may expect a series of similar French victories, as the Prussians are not likely to risk a decisive engagement west of the Rhine. The Emperor was present during the engagement at Saarbrück with his son, and sends a delighted despatch to his mamma at Paris, telling how the boy stood fire and the troops wept to witness his tranquillity.

King WILLIAM has left Berlin, and is reported at Mayence, with his staff. Earthworks are springing up all along the Rhine provinces, and the country between Coblenz and Mayence is cut up by them in all directions. Trenches have been opened two leagues from Cologne, and the fine park of the city and the costly chateau of a wealthy banker razed to make room for additional defences. An intrenched camp has been established in the triangle formed by Cologne, Coblenz, and Mayence. Such are the telegraphic statements. A Vienna despatch states that the Austrian Government is concentrating an army of 60,000 men to watch the Bohemian frontier. From Florence we learn that the Italian army is being rapidly raised to 120,000 men. A camp of 20,000 is established between Mantua and Verona, and two camps of observation are forming on the Pontifical frontier. The French are about to withdraw from Rome, and the chasseurs have already left Civita Vecchia and arrived at Marselles. The British Government proposes to the House of Commons to add 20,000 men to the army, and submitted estimates requiring £2,000,000 for this purpose. The British artillery is reported to be in a most effective state, and the militia rapidly recruiting.

A DESPATCH from Reading, Penn., dated August 3, reports that the experiments with "the Lyman or multi-charge cannon case, at the Scott foundry, which were in progress for some time here, have been concluded. The gun has four-pounder pockets along the bottom of the bore, intended to give the ball increased velocity. It is claimed that it

will carry a projectile ten miles. A test was made with a hundred-pound ball in the presence of the examining board, Commander TEMPLE and Commodore HITCHCOCK, United States Navy, and Captain PRINCE of the United States Army, assisted by J. J. O'REILLY, electrician at Frankford Arsenal, Philadelphia, who had charge of the Nignotti electro-ballistic pendulum used to test short intervals of time and the momentum of projectiles."

THE last Congress so constructed its appropriation bills with reference to balances of appropriations, that since its adjournment the Government has discovered that serious embarrassment must occur in the various departments. The First and Second Comptrollers of the Treasury have come to the decision that no balances whatever of the past year can be used, as they must all be turned over at once to the Treasury Department; also, that all the moneys accruing to the Department from the sales of quartermaster's stores, ordnance materials, etc., must be turned into the Treasury; and all the balances to the credit of the arsenals, cemeteries, etc., must also be disposed of in the same way. The Engineers', Quartermasters', and Commissaries' Bureaus of the War Department failed to make many necessary estimates, because they depended on these balances. This embarrassment applies as well to the Navy, Treasury, and Interior Departments, and to some extent to the State Department and the new Department of Justice.

The Attorney-General has, at the request of the Secretary of War, delivered an opinion as to the construction of the act making appropriations for the legislative, executive, and judicial expenses of the current fiscal year, which, while it gives the act the most liberal interpretation, does not relieve the Government of its difficulties. These defects in the appropriations, with other things, are likely to compel the call of an extra session.

THE favorite subject of cable telegrams, just at present, is the *mitrailleuse*, and the last piece of intelligence as to this wonderful French "machine gun" is to the effect that Frankfort offers 500 thalers, or about \$300, to the first captor of one of them. So far as this new engine of destruction is concerned, we have the best reason for assuming that Prussia is quite as well supplied with it as France. There are two types of the invention in Europe—the French one, about which so much fuss is made, and a Belgian affair claiming to be its superior, designed by M. MONTIGNY. In suggestion both inventions are due to the original idea of Dr. GATLING, and there is indeed very little question as to the French *mitrailleuse* being a direct theft from the American. In the autumn of 1863 the attention of the Imperial Government was drawn to the Gatling gun, and the Emperor expressed, through the usual media, "a profound interest" in the invention. The time, however, was not opportune for further study of the affair, or the Emperor's thoughts, on peace intent, were not in frame for the adoption of a new destructive engine; at any rate, the invention was, for the time being, declined. Shortly afterward mysterious whispers began to circulate of a wonderful gun, with which experiments had been made under the eye of NAPOLEON. As time passed on, it began to be known that the French army was to have the use of "a machine gun," a *mitrailleuse*. The fact of the Gatling gun having been presented to, and, so far as any opinion at all was advanced, approved by the Imperial inspection, is persuasive evidence against the French originality of the *mitrailleuse*; but there are even stronger indications of the theft in the mechanism of the machine itself, which has indispensable features exactly identical with the Gatling. In a forthcoming number we purpose to give a faithful illustration and careful description of the American invention, which is far superior to either of its European imitators, between which, by the way, there seems very little difference. The recent stories, suggested by the terrible execution of the *mitrailleuse* upon a crowded abattoir of broken-down horses, and the announcement that each bat-

talion is to have *mitrailleurs* on its flanks, bears internal evidence of being intended for moral effect on the enemy. The comparative accuracy of American and European machine guns is best illustrated by the trial results. In experiments, for instance, with the Montigny gun, upon a target 97 feet long and 26 feet high midway, at a distance of 430 yards, out of 370 cartridges placed in the gun, 40 were missfires, 273 struck, and 52 altogether missed the target. At 650 yards the hits were in a proportion of about 50 per cent.; and at 1,100 yards, for some reason, the trial was given up. Compared with such execution the operation of the Gatling gun is really marvellous. At a target 10 feet square, 500 yards distance, there was not one lost out of 110 shots. At the same target, 1,000 yards, 76 per cent. of the shots struck. Other experiments have demonstrated, under proper direction, the scattering powers of the gun upon a more extended object.

We shall be disappointed, however, if the French obtain any such results from the *mitrailleur* as the newspaper reports would have us believe. They are far too much inclined to advertise its virtues to convince us that they have much faith in it themselves. It will undoubtedly do sufficient service in certain situations to justify its use; but that it will have any decisive influence on the conduct of war, we do not anticipate.

THE value of railways as a means of transporting troops in war was fully appreciated by France previous to the struggle in this country; though the great distances over which operations were conducted here admitted of its most perfect demonstration. During the Austro-Italian campaign, the transportation of troops by rail was so thoroughly organized in France that the Emperor was able to convey by one line 15,000 men per day consecutively. Prussian facilities for the passage of large bodies of soldiers are hardly less, it being stated that each of the four roads running from the Elbe to the Rhine has a capacity for 20,000 troops in a day; another day, however, being required for the return of engines and carriages to their point of departure. The singular assertion of the London *Times* that the Prussian troops have become demoralized by travelling on railroads, is inconsistent with experience, both in our own war and in the last European campaign of 1866, and reflects severely either upon the Prussian staff or the *Times's* correctness of observation.

THE telegraph reports that the court of inquiry ordered by the Secretary of War to investigate the charge that the colored cadet SMITH, at West Point, has been badly treated, closed its labors last week, and the record and findings are now in the hands of Secretary BELKNAP. The court sat without regard to hours, and examined everybody likely to know anything about the matter. The record fills nearly 200 pages of foolscap manuscript, and a copy of it is to be furnished to the House members of the Board of Visitors, who were also ordered to look into the subject. The Secretary will necessarily be some time in reading the papers for his approval or disapproval, but he expects to make the finding of the court public in ten or twelve days.

IN further answer to the inquiries of our correspondent "Ozark," we quote this week from the London *Engineering* the first of a series of articles in which it is proposed to give the result of Captain ERICSSON'S investigations into the nature of solar heat and the means of making it available as a mechanical power. "This question," says the journal from which we quote, "novel and startling as it was when it was first proposed some years since, may now be considered to have assumed a practical form—thanks to the extended and careful experiments conducted by the author of these articles. The results of his experiments, pointing as they do to a means whereby the arid sunburnt portions of the globe are in possession of a vast inexhaustible source of power that may be utilized if science and mechanical skill be properly directed, cannot be overrated. It is idle, now that investigation has proved its possibility, to laugh at the instructor who points out what may be achieved in the immediate future."

"In the investigation of this question," it adds, "and the publication of its results, Captain ERICSSON has but one object—that of being useful. His life, and long professional career, has been so crowned with honor that he needs no more, and it is simply in the hope and expectation of conferring a universal, almost an immeasurable benefit, and not with any prospective view of fame or profit, that he has taken up and is pursuing these especial labors."

We only add, in conclusion, the expression of our regret that Captain ERICSSON should, for any reason, have thought it necessary to travel so far to secure an audience for the report of his investigations.

WE have omitted to call attention to the fact that a fund has been started in London and Liverpool to aid in the relief of the families of those American officers and seamen who were lost through the collision between the *Bombay* and the *Oneida*, Sir JOHN LUBBOCK having consented to act as treasurer in London. Friends of both countries are invited to contribute, and the hope is expressed in England that the subscription will be extended and treated everywhere as an expression of international good-will. It will certainly be received as such in this country. Mr. R. B. FORBES writes us that the fund he is raising for the children of Captain WILLIAMS exclusively now amounts to about \$8,000; and as contributions continue to flow in, he hopes to make it up to \$10,000 in due time.

As our own contribution to the *Oneida* fund, we promise to turn over to the treasurer of the fund one-half of all we receive between this and the 1st of January, 1871, for subscriptions to the ARMY AND NAVY JOURNAL from the officers and men in the naval service whose names are not already on our subscription books. We make this offer for the double purpose of assisting this fund and of persuading the members of the naval service to what has been with many of them a long neglected duty.

WE find in the *Troy Whig* of July 29 this paragraph:

"Hon. W. W. Belknap, Secretary of War, and General A. B. Dyer, Chief of Ordnance, spent yesterday at the arsenal, and last night took the train at Albany for Springfield. The Secretary is on a tour of inspection and observation, and will visit a number of arsenals and armories before returning to Washington. He seemed pleased with the result of his observations yesterday morning, as, indeed, he must needs have been, for everything about the arsenal is as neat as wax-work, under the careful superintendence of General P. V. Hayner, commanding. In the afternoon the Secretary and General Dyer were dined and otherwise hospitably entertained by the general in command. We saw Whitworth and Parrott guns, mortars, howitzers, and the famous Gatling gun, that spits out anywhere from 20 to 500 bullets per minute; but the most formidable thing we saw there—the thing that terrified us most—was an old Revolutionary blunderbuss. It is supported on a swivel, and brought to the shoulder when it is fired. Its mouth resembles a large funnel, and it looks capable of demoralizing the whole N. G. S. N. Y. There is a model of a rifle there that the Government prefers to the needle-gun, which is certainly a great deal of preference, but we presume the Government knows."

To which we may add that if the Government does not know that there is not only one, but many American guns which are to be preferred to the needle-gun, it knows very little. The Prussian Government has discovered the fact also, and immediately after Sadowa, where the needle-gun did them such excellent service, set about seeking a substitute for it. The threatening relations between Prussia and France made an immediate change inexpedient, however, as it would not do to shake the confidence of the Prussian troops in a gun upon which they must depend for some time to come. The needle-gun has been somewhat improved by changes to which we have already called attention, and we are disposed to think that it will prove to be a better gun than the much-advertised Chassepot, which was chosen hastily to meet the emergency, its chief recommendation being the fact that it was the invention of a French officer. It was brought into competition at the time of its selection with only two or three other breech-loaders, none of which were among the best. It has been tested in England and elsewhere in competitive trials with other

guns since its adoption by France, and very much to the damage of its reputation. A French pamphleteer, whose brochure we have before us, asserts, moreover, that a large proportion of the Chassepots in the ranks of the French troops are very badly made. The parts are not interchangeable, as they should be, and the gun has many faults which would condemn it anywhere in a fair trial. Still, there is not enough difference between the needle-gun and the Chassepot to give either army any decided advantage.

OUR correspondent at Paris writes, July 17, as follows:

"The Prussian Minister, M. de Werther, took his leave of the French court two days ago, and before this reaches your hand, you will doubtless hear of a great engagement between the two powers who now aspire to the mastership of Western Europe. Since the commencement of the discussion with Prussia the French have been steadily massing their troops on the eastern frontier, and before long they will have enough men concentrated to warrant them in an actual invasion. The ostensible cause of the quarrel is frivolous enough, but bad blood has existed on both sides for the last two years, so that in the long run blows were inevitable. There is only one source of congratulation: that the war cannot possibly be of long duration. A few weeks or a month will, in all probability, terminate the strife. The contest will doubtless be a fierce one; for there is much to gain and much to lose on both sides. Still it is some satisfaction to know that it will be short."

"At the present time we have nothing but clamors of war in Paris. Three or four days ago the case was perhaps different, for in the eastern faubourgs of the city, where the workmen chiefly reside, a number of demonstrations were made of a decidedly revolutionary character. It is known that several crowds assembled and chanted a refrain,

Les peuples sont nos frères, nos frères, nos frères,
Et les tyrans ennemis, ennemis, ennemis.

"But at present these grumblings are drowned in the general clamor for war. The bourgeois, in contradistinction to the working class in Paris, support the Napoleonic dynasty to a man, and have communicated their enthusiasm to every one else. If a stranger visits the boulevards at the hour of ten or eleven in the evening, he will have a very excellent opportunity of witnessing the demonstrative character of the French. The sidewalks are almost impassable on account of the numbers present. Two or three hundred sometimes assemble in a crowd, and commence shouting "A bas la Prusse!" "A bas la Prusse!" "A bas la Prusse!" all of them speaking in unison, as if in the act of marching. At other times the cry is "Vive la guerre!" "Vive la guerre!" "Vive la guerre!" and again we have the Marseillaise chanted in stentorian accents. But in all cases the general sentiment is unmistakable, and those who might otherwise dissent are forced to join in it.

"At this stage of the contest it would, of course, be futile to speculate as to the general results. Bismarck and Napoleon are both men of ability, have large armies at their back, and hate each other most cordially. In the organization of their armies there are differences of detail, although, take it all in all, the advantages and disadvantages on each side are about equivalent. In France, for instance, there are more old soldiers than in Germany—the term of actual service in the one country being at present nine years, and only one-third of that period in the latter. But, *per contra*, it must be recollected that in Prussia the knowledge of arms is more generally diffused than even in France. Napoleon has 38,000,000 of people at his command, and King William somewhat less; but the one fights on his own soil and the other is an invader, which, of course, turns the advantage in favor of Prussia. Germans shout for their fatherland, but the French are equally ambitious for glory; so that, as Sir Lucius O'Trigger remarks, there never was prettier cause for a quarrel. Still, take it all in all, one fact must be apparent to any one who has seen troops, namely, in no country in the world is so much done as in France in order to give life and individuality to the soldier."

WE learn unofficially that the court-martial in the case of Surgeon Bailey has resulted in the acquittal of that officer, he having been found not guilty of the charge, "conduct unbecoming an officer and a gentleman," and all the specifications. The Army is aware that the court-martial grew out of the separation of Surgeon Bailey from his wife, and his obtaining a bill of divorce from her from the Delaware legislature, of which bill she subsequently obtained the repeal. It has seemed to us all along a case for civil rather than military tribunals; but we are pleased to record the acquittal of Surgeon Bailey.

THE EUROPEAN CRISIS.

(From the London Spectator of July 16.)

THE recent Plebiscite, which re-established the throne of the Napoleons, revealed to the Emperor the weak point of his position. France was annoyed by his foreign, and not by his internal policy. He had not of late years sufficiently flattered the arrogance of a people who, while believing their country the first in the world, dread and detest the prosperity of any neighbor who may contest, or may seem able to contest, their claim. The orators of the opposition made much of Sadowa. Sadowa reappeared too often in the prefects' reports. Fifty thousand soldiers voted against the empire, and the main cause was believed to be the loss of military prestige France had suffered in Europe since Sadowa. If the dynasty was to last, if the soldiery were to be always ready to fire upon Parisians, if the weakly lad now riding velocipedes was ever to ascend the throne, Sadowa must be avenged. That was the Emperor's conviction, and accordingly, with that supreme selfishness, that callous recklessness of human misery which in all great crises he has invariably displayed, he resolved on war—war with Prussia, with the Rhine for prize. Accident gave him a magnificent opportunity. Among many candidates for the Spanish throne, Marshal Prim had turned his eyes to the nearest agnate of the Braganças, Leopold of Hohenzollern, had mentioned his idea so publicly that many weeks ago M. J. Lemoine criticised it in the *Debats*, and had when pressed by the ex-Queen's abdication attempted to make his selection a reality. Aware, however, that the Empress Eugénie would move heaven and earth for the family whose subject she was born, he kept his negotiations secret, trusting that when the choice had been made the Emperor, who had only interdicted the Orleanist and the republic, would tolerate a Catholic German of Portuguese connections. He offered the crown to the Prince, therefore, through a secret agent; but the secret was betrayed by the seizure of a telegram en route, and Napoleon found his opportunity. His ministry were irritated to find how stupid their embassies had been. His generals were irritated by the thought of an alliance which might threaten the southern frontier. His people were irritated to find that Bismarck, Bismarck the betrayer, Bismarck the bogey, had for the twentieth time clutched a prize in the diplomatic game. At a hint the inspired journals raved of danger to France from the "aggressive ambition" of Prussia; the public, always thinking of Sadowa, responded eagerly; the army grew savage with excitement, the Legislative Chamber shook with enthusiastic cheers at the first mention of war, and as his first act the Emperor proposed an ultimatum to Berlin. Prince Leopold should not reign in Spain under penalty of war. It was believed at the Tuileries that this demand, if proffered with sufficient rudeness, with talk about hours, and fanfare about susceptibilities, would evoke a refusal; but the Tuileries had not understood the nature of Teutonic pride. The soldierlike old King who has made Germany met all this arrogance with cold disdain, ordered his press to ask what all the pother was about, declined at first to interfere with Spanish affairs one way or another, and finally, when convinced by the agitation of Europe that the menace was serious, refused to let Germans die for a remote dynastic interest of his own. As King he would do nothing, as head of the Hohenzollerns he would disapprove the candidature. Accordingly the candidature ended, Prince Anton, father of Leopold, withdrawing his son, while the Spanish government announced that they had abandoned their intention of electing him. There seemed a chance of peace, and Napoleon, at the cost to Europe of a few score millions of movable property, had triumphed over Spain. This, however, was insufficient. Sadowa was not avenged because Serrano fled; there must be at least some open humiliation of Prussia; and accordingly France demanded that King William as King should pledge Prussia never to allow any member of her royal family, however distant, to ascend the throne of Spain—that is, should acknowledge that he had commenced and had failed in a gigantic intrigue. To make sure of a repulse, the French Ambassador, M. Benedetti, received instructions which induced him to assail the King on the public promenade of Ems with this demand, an affront which, even in the history of French diplomacy, always able, but so often arrogant, is almost without a parallel. It was met with haughty dignity; the King, looking steadily at M. Benedetti, ordered the aide-de-camp by his side to inform him that he declined to receive him, having no further communication to make—and the Emperor had at last succeeded. He had aroused the German heart at last. It was, then, insult that he meant, to be accepted under penalty of war, and Germany stood up ready for the inevitable conflict. Cool, cynical Berlin, which believes in no one, Hohenzollerns and Providence included, no sooner heard of this incident than it rose storming for war, and before these words reach our readers the orders will have been issued which call into the field the army which won Sadowa.

This is, we believe, the only true, as it is certainly the only intelligible, explanation of the astounding incidents of the week; and we question if in history there is another such instance of an attack on the human race in the interest of an individual. France was not only not threatened by Spain, but knew she was not threatened; for from the first it was understood that Spain, whether she persisted or not, would be permitted to be neutral. Prussia, on the other hand, was not only not threatening France, but rather than wage a purposeless war submitted to see her dynasty refused permission to accept a compliment from a friendly nation. Napoleon, unprovoked, or victorious over the provoker, deliberately plunges all Europe into war, in order that, by the seizure of the Rhine, or the visible humiliation of the Prussian King, he may regain a shattered prestige with the soldiery who support his throne. For this object, and this alone, he exposes Europe to all the dangers and miseries of a war which must be terrible, and may be universal. It is childish to speak of such a war as a

"duel" between France and Prussia. Will Denmark remain quiet while Frenchmen are on the Elbe, or Russia sit patient while Denmark becomes a German province? Will armies counted by quarter-millions respect that neutrality of Belgium which will embarrass every military design, which will make the most necessary movements impossible, and which, nevertheless, has been formally guaranteed by Great Britain? For this, and this only, to make his boy's succession a little more likely, the French Emperor has risked not his dynasty merely, but the people who elected him their chief, and who, after eighteen years of submissive quiescence, after the sacrifice of a million lives and nearly two hundred millions of treasure, after seeing the conscription doubled, and every promise of free institutions broken—it is not a fortnight since the Emperor refused to hear of elective mayors—are called on to do battle for existence with a power which Imperial policy has helped to call into being. For it is a battle for existence, to be waged under most unfavorable circumstances. That the Frenchman is a splendid soldier, that the French army is the most perfect of military machines, that a contest with France is a contest in which no race has ever greatly won, we willingly acknowledge. But this time France is fighting, in a bad cause, the only nation in which army and people are contemporaneous, just when its self-confidence is excited by magnificent victories, and it has at its head the men who won them. It is not a council or a king who will guide the Prussian army, but the little man in spectacles who, away from the fire, struck down the Austrian empire in a week. The empire, fatal to every other form of genius—to literature, which it has enslaved; to art, which it has sensualized; to statesmanship, which it has suppressed—has not been friendly to the development even of military genius. It has fought many battles, but it has not developed many first-class soldiers. That France, were the war to last, would produce generals of the first rank, goes without saying; but will it last, or will it be ended in a month, while the Imperial policy, which considers devotion above genius, is still in its full force? France has no ally, for Austria dare not claim to re-enter Germany by the side of the Germans' foe; she has no advantage of situation, for Prussia can invade her more easily than she can invade Prussia; and she has no advantage of numbers, for Prussia can collect all the soldiers any generals can handle with effect. She enters on war in her own strength only, amid the disapprobation of Europe, under the leadership of a man of sixty-two, who has never shown any capacity for generalship, and who sets before him as an end to do what has never yet been done—to turn a nation's history back. With France in the field, it is folly to predict defeat, or even repulse; but if past history ever justifies prediction about the future, Germany will not be unmade, and the Napoleons will be found to have wearied the patience of heaven out.

THE REMINGTON GUN IN CUBA.

THE following is a translation of the report on the Remington arm from the commission in the island of Cuba, submitted to the Spanish Government:

The brigade or committee of officers appointed by the general sub-inspector of this military division, composed of those mentioned in the margin, having assembled under the presidency of Brigadier-General Don Eduardo Segura, this officer declared to them that the object of their meeting was to consider and report upon the best war arm to be adopted and selected out of those called breech-loaders, and that have been used in the present Cuban campaign.

In consequence thereof the committee proceeded at once to the study and close examination of all and every one of the weapons, taking as point of departure the proceedings of the nine different sub-committee that from time to time have made experiments on the Remington gun of 11 mill.; the result of which was its adoption for the army in this island.

They likewise made trials with the Peabody, Sharps 4th, Berdan (Russian model), Miller, Pal-Gallagher, Spencer, and other systems of repeating or single-shot guns, as well for infantry as cavalry.

Not only were all and every one of the above mentioned systems closely inspected and examined and tried so as to form the best possible idea of their merits and ballistic qualities, but all the models generally known in Europe and the principal ones in North America that could be procured were also submitted to the same trials.

In order to ascertain the qualities of each system, it was resolved to ask the opinion of all the superior officers of infantry or artillery, who, during the last eighteen months' campaign, had had the command of troops armed with breech-loaders of whatever description, commanding them to report on the same, and to state the result of their experiments.

These reports having been carefully examined, independently of informations gathered from other sources, the brigade or committee of officers has come to the conclusion that the Remington gun of 11 mill. calibre is, by common consent and the general opinion of natives and foreigners, that which unites most of the conditions requisite for a war arm, and that the same qualification is applicable to the carbine and pistol to be used by cavalry, the rifle carbine and pistol being loaded with central-fire cartridges.

Experience has shown that this system is not liable to get out of order, notwithstanding the rough handling to which in war it must be submitted; that shots with it never fail; that its mechanism is so simple and so perfect that several divisions of the army have voluntarily adopted it during the present campaign and made use of it with facility and without accident, notwithstanding the soldier had not time or leisure to be properly instructed in the handling of the weapon.

The result of the trials has been, that though the cartridge may explode or burst, yet the breech mechanism still remains unchanged; a circumstance of the

highest importance, and which makes the weapon comparatively preferable to all others of its class.

The firing is not only certain but precise, the sighting being so well graduated that a middling marksman invariably hits the target, to which condition of the Remington gun is owed the fact that the soldier who has once used it has unlimited confidence in his arm.

The secretary of the committee, Colonel Don Francisco Rull, says in his report, that having been in command of his battalion during a whole year of the present campaign, his men have constantly used the Remington gun without his having experienced one single case of failure either in the system or in the gun itself.

To the above statement the committee is in a position to add in honor of the manufacturers, Messrs. Remington & Sons, of Ilion, U. S. A., that the material and workmanship are good, especially the fittings, and the rifling of the barrels; and the iron and steel employed cannot be improved upon.

The committee is moreover in possession of undeniable proofs, that in some of the guns which have resisted great trials or rough usage, the barrel has been bent so as to form two arms of an angle less than a right angle, and yet not a flaw or crack is to be seen.

The committee is finally of the opinion that the Remington system is in every respect the best, and that which unites all the conditions requisite for war.

After which, and considering the whole affair to have been sufficiently tried and examined, and the report to be given in full as required, the committee adjourned after resolving that a copy of the deliberations and opinion should be sent to the general sub-inspector of the division, of which the present is a copy.

Signed at Havana this 25th April, 1870.

Colonel FRANCISCO RULL, Secretary.

Colonel ENRIQUE BARBARA.

Colonel NARCISO HERRERA DAVILA.

Brigadier-General EDUARDO SEGUERA, President.

For certified copy:

Colonel FRANCISCO RULL, Secretary.

Brigadier-General EDUARDO SEGUERA, President.

SOLAR HEAT.

THE following communication from Captain Ericsson appears in London *Engineering* for July 15:

In a previous communication on this subject, I adverted briefly to some experimental engines which I have constructed in order to ascertain the practicability of employing solar heat as a motive power. I also adverted to the imperfections of the methods adopted by certain physicists to determine the dynamic energy of the sun's radiant heat. Having in the mean time perfected the necessary instruments for measuring, with desirable precision, the dynamic force of solar heat under the varying conditions governed by the changes of altitude, seasons, atmospheric temperature, and the presence of aqueous particles in the air—elements of paramount importance in judging of the applicability of the sun's radiant heat as a motor—I intend to lay before the readers of *Engineering* a series of articles giving a brief account of my researches, to be accompanied by accurate illustrations of the instruments employed.

Apart from ascertaining the dynamic energy of solar radiation by accurately measuring the units of heat developed in a given time under the varying conditions adverted to, I have extended my labors to the determination of the true intensity of the sun's radiant heat. Accordingly, I have instituted a series of observations which enable me to estimate the loss of intensity during the passage of the rays through the atmosphere. By adding this to the ascertained intensity of the radiant heat on reaching the surface of the earth, and before it is affected by terrestrial radiation, I can determine the actual intensity at the point where the rays enter the earth's atmosphere. My attention was originally called to the important subject of actual intensity of solar radiation by reflecting on the limited amount of dynamic energy, about five units of heat per minute upon an area of 142 square inches, exposed perpendicularly to the sun's rays, while the thermometer indicated 150 deg. above Fahrenheit's zero, or 610 deg. above absolute zero. Preliminary experiments conducted very carefully, having disclosed the startling fact that the real intensity of solar radiation marks a point on the thermometric scale several hundred degrees below the freezing point of water, I resorted to the expedient of concentrating the sun's rays by such a method that the degree of concentration could be accurately measured. Investigations conducted in conformity with this method of determining the true intensity of the radiant heat, proved the temperature to be nearly identical with that shown by the preliminary experiments referred to. The extraordinary fact was accordingly established, that the intensity of the sun's rays before gaining by terrestrial radiation, is so feeble that fluid mercury contained in an exhausted shallow vessel covered with a thin lens of about 50 inches focus, and exposed to the full power of a clear sun, will very rapidly become solid; provided that the vessel is prevented from receiving heat from surrounding substances. It matters little whether the molecular action within the mass of mercury necessary to keep it in a fluid state is checked by the slower undulations of the solar ray, as waves of a rapid motion are checked by mingling with waves of less motion; or whether the molecular action within the mass of mercury is communicated to the surrounding cold vessel. In either case the reduced molecular force within the freezing mercury proves the inadequacy of the action produced by the sun's rays to maintain the metal in a fluid state.

Incidentally the experiments thus instituted to demonstrate the feeble power of solar radiation before its intensity is augmented by the intervention of the earth's atmosphere have established the fact that the surface of the moon, being devoid of any gaseous envelope, is at all times, even under the vertical sun of the long lunar day, intensely cold. This apparently irrelevant subject will be considered hereafter. In the mean time, illustrations

and descriptions will be presented of the instruments by means of which it has been satisfactorily demonstrated that before the temperature is augmented by the accumulation of heat which results from terrestrial radiation and the presence of the atmosphere, the sun's radiant heat, as before stated, marks a point on the thermometric scale several hundred degrees below the freezing point of water.

Before entering on a description of my solar calorimeter (a denomination adopted in preference to "actinometer," as its object is only that of measuring the amount of heat transferred from the sun to the earth), I deem it proper to say that I object to the inferences which Pouillet, Mayer, and others have drawn from our knowledge of the dynamic force of solar radiation on a given surface of the earth. Unquestionably the amount of heat transferred from the sun to the earth may be accurately computed by means of the solar calorimeter; but to infer from the point thus established, that the sun parts with as great an amount of heat in all directions on an equal area as that which the earth during its orbital motion receives by intercepting and successively arresting the solar wave, is a mere gratuitous assumption. The practical mind refuses to accept a theory which involves such a vast disproportion between the means and the end, as the assumption that 200,000,000 times more heat is wasted than that which is employed to animate the planetary worlds of our system, more especially as the improbable and extravagant, not to say absurd, speculations which have been put forth by Mayer, Helmholtz, and others all fail to suggest any mode of supplying the assumed enormous waste which does not point to a speedy extinction of the central force. I will return to this subject on a future occasion when the consideration of the new motor, the solar engine, will be in order.

M. Pouillet's pyrheliometer being now generally known through Professor Tyndall's work on Heat as a Mode of Motion, the imperfections of that instrument may be pointed out without minutely describing the method adopted by the French physicist in determining the amount of dynamic force which the earth receives from the sun in a given time. The radical defect of Pouillet's instrument is, that it cannot be used during winter when the thermometer is below the freezing point, as warm water would have to be used, in which case the loss of heat by radiation and convection would be so great as to render the task futile of accurately measuring the force of solar radiation. This defect of Pouillet's method is the more serious as the heat of the sun is most intense during the winter solstice for given zenith distances, not only on account of the diminished distance between the sun and the earth, but owing to the fact that the sky is clearer during a cold winter's day than during the heat of summer when the air is charged with vapor.

The loss of heat by radiation, in the pyrheliometer; loss of heat by convection, accelerated by currents of air; the absence of adequate means for circulating the fluid contained within the heater; the rule method of keeping the instrument perpendicular to the sun by hand; not to mention the disturbing influence of respiration and the radiation from the operator's body, are self-evident defects. Nor can we pass unnoticed the want of any direct means of ascertaining the depth of the atmosphere through which the radiant heat passes at the moment of measuring its energy. I need scarcely point out that computations based on latitude, date, and exact time, are too complex and tedious for investigations in which the principal element, the depth of the atmosphere, is continually changing.

It will be well to state at the outset that the solar calorimeter, and all my instruments constructed for investigating the mechanical properties of solar heat, are attached to a table which swings upon a horizontal axle, and which rotates round a vertical pivot, appropriate mechanism being applied for regulating the combined vertical and lateral movement in such a manner that the top of the table, composed of a heavy brass plate accurately faced, is at all times during observations kept perpendicular to the central ray of the sun. Hence, instruments whose base is at right angles to their vertical axis, may be secured at any point of the face of the rotating table, without further adjustment. A graduated arc is attached to one end of this table, provided with an immovable index; consequently, the sun's zenith distance may at all times be ascertained by mere inspection, a very great convenience in an investigation which at every instant is dependent on the changing depth of the atmosphere through which the sun's rays pass. As this depth bears a fixed relation to the sun's zenith distance, it may of course be accurately determined by noting the position of the fixed index on the graduated arc; but as there is no time during investigations of this kind for computations, as already pointed out, I have constructed a graduated scale provided with a movable radial index, which, by being brought to the division corresponding with the observed zenith distance, shows the depth of atmosphere. It is proper to observe that in constructing this scale, I have assumed the earth to be a perfect sphere of 8,956 miles radius. The error resulting from this assumption is, however, so trifling, that the described graphic method of ascertaining the depth of the atmosphere may, without appreciable discrepancy, be employed in all latitudes. The solar calorimeter consists of a double vessel, cylindrical at the bottom and conical at the top, an 8-inch lens being inserted at the wide end in the manner shown by the illustration. The interior is lined with burnished silver, and the space between the two vessels is closed at the top and bottom by means of perforated rings, the object being to distribute equally a current of water to be passed through the space between the vessels. Nozzles are applied at the top and bottom of the external vessel of suitable form to admit of small hoses being attached. A stop-cock with coupling joint is applied at the bottom, communicating with the interior of the calorimeter, and connected with an air pump for exhausting the same. A cylindrical vessel, termed heater, with curved top and bottom, composed of polished silver, is secured in the

lower part of the instrument, and provided with a conical nozzle at the top, through which a thermometer is inserted from without. Within the lower part of the heater is introduced a centrifugal paddle-wheel, surrounded by a cylindrical casing divided in two compartments by a circular diaphragm, the lower compartment containing four radial wings or paddles, the diaphragm being perforated in the centre. The centrifugal paddle-wheel revolves on an axle which passes through a stuffing box applied at the bottom of the double vessel, the rotary motion being imparted by means of a pulley secured to the lower end of the axle. The operation of this wheel, intended to promote perfect circulation of the fluid within the heater, is quite peculiar. It will be readily understood that by turning the wheel the centrifugal action of the fluid produced by the rotation of the paddles will draw in water downwards through the central perforation of the diaphragm, and force the same into the annular space round the casing of the wheel; thus an upward current will be kept up through this annular space uniform on all sides. This current, after reaching the top of the heater, will then return, first entering the open end of the casing of the wheel, and ultimately the central perforation of the diaphragm. I have been thus particular in describing this system of promoting uniform circulation within the heater because a proper indication of the actual mean temperature of the water contained in the same is the all-important condition on which depends the accuracy of the determination of the number of units of heat developed. It only remains to be pointed out that the lens, which is so proportioned as to admit a sunbeam of 52 square inches of section, is placed at such a distance from the heater that when the concentrated rays reach the upper end (painted with lamp black) they are confined to an area of 3.25 square inches, precisely one-sixteenth of the sectional area of the sunbeam which enters the lens.

It will be obvious that the concentration of the radiant heat on an area of only one-sixteenth of that of the section of the sunbeam removes a very difficult disturbing element from the investigation, viz., the great amount of heat radiated by the blackened surface of the heater, which, in the pyrheliometer, is sixteen times greater than in the solar calorimeter. But this is not all: while the sixteen times more extensive blackened surface of the former is exposed to currents of air, the disturbing effects of which can neither be controlled nor computed, error arising from convection is wholly removed from the latter, because the reduced blackened surface of the heater receives the concentrated radiant heat within a vacuum. The loss of heat at the bottom and sides of Pouillet's instrument, caused by convection and currents of air, is likewise wholly removed in the solar calorimeter by the expedient of operating within a vacuum. It will be seen, therefore, that the loss of heat by convection and currents of air has been wholly obviated in the solar calorimeter, while the loss caused by radiation from the blackened surface of the heater has been reduced to a mere fraction. It may be contended, however, that the loss by radiation of the polished heater against the interior polished surface of the calorimeter, although minute, is yet appreciable; and that some heat will be lost by conduction at the points where the heater joins the external vessel. Even these trifling sources of error, it will be seen presently, have been removed by the new method. A force pump and capacious cistern containing water are arranged near the calorimeter, a uniform temperature of 60 deg. being kept in this cistern by the usual means of a warm and cold water supply. By appropriate hose and the force pump mentioned, a constant current is kept up through the space between the internal and external casings of the instrument; hence, every part of the latter may be brought to a uniform temperature of 60 deg. in a few minutes. The process of measuring the solar energy is conducted in the following manner: The thermometer being withdrawn, the heater is charged with distilled water of a temperature of about 45 deg., after which the thermometer is again inserted. The table supporting the instruments should now be turned towards the sun, and the paddle-wheel put in motion. The indication of the thermometer must then be watched, and the time accurately noted when the mercurial column marks 50 deg. on the scale, the observation continuing until the thermometer marks 70 deg., at which point the time is again accurately noted. The experiment being then concluded, the table should be turned away from the sun. It scarcely needs explanation, that during the elevation of the temperature of the water from 50 to 60 deg. the instrument radiates towards the heater, and that while the temperature rises from 60 to 70 deg., the heater radiates towards the instrument. In each case the amount of heat radiated, that is, the gain and the loss, is almost inappreciable, since both the heater and the surrounding internal vessel are composed of polished silver. The amount of gain and loss of heat by conduction at the points where the heater joins the surrounding vessel, if appreciable, evidently balance each other in the same manner as the gain and loss by radiation.

The weight of distilled water at 60 deg. contained in the heater, and the weight and specific heat of the materials which compose its parts, being ascertained, the number of units of heat necessary to elevate the whole 20 deg. may be readily calculated. To this must be added the percentage of calorific energy lost during the passage of the sun's rays through the lens. The sum will represent a permanent co-efficient for each particular instrument which may ever afterwards be employed to determine the dynamic energy of the sun's radiant heat. Obviously the indication will be equally correct during the winter solstice in a northern latitude with the mercurial column at zero, as during the summer solstice within the tropics, when the thermometer marks 100 deg. in the shade.

It must not be supposed that the same difficulty presents itself in ascertaining the loss of calorific energy of the rays of heat as that involved in a determination of the retardation which rays of light suffer

during their passage through a lens. In order to determine the former, we have only to compare the units of heat developed by the direct action of a sunbeam of a given section, with the number of units developed by another sunbeam of equal section during an equal interval and at the same time, acting through the lens, the retarding influence of which we desire to ascertain. I have constructed an instrument for this purpose, by means of which the diminution of the calorific energy of the sun's radiant heat can be accurately measured for all lenses not exceeding $8\frac{1}{2}$ inches diameter. This instrument will be delineated and explained at the proper time.

Referring to the experiments which have been made with the solar calorimeter, it is especially worthy of notice that the sun's energy, as shown by this unerring mode of measuring the force actually transferred to the surface of the earth, is never regular. The force of the radiant heat, call it molecular action, indicated by the increment of the temperature of the fluid in the heater of the instrument, is continually oscillating. At first I attributed this circumstance to invisible masses of light vapor passing through the atmosphere. More recent observations induce me to think that want of constancy in the evolution of the heat at the source may possibly be the true cause.

NEW YORK, June 21, 1870.

SEA-SICKNESS.

(From London Engineering.)

NOTWITHSTANDING the popular superstition that Britons are born sailors, we are bound to acknowledge that there is widely spread throughout the Anglo-Saxon race a wholesome dread of that disagreeable accompaniment of but too many voyages, sea-sickness. With our continental neighbors this dread is as a rule intensified, and the *mal de mer* is to a Frenchman a thing of horror, not to be spoken of lightly, but to be guarded against by "infallible" specifics, and only to be encountered when it is impossible that it should be avoided. We know that there are many men of all nations to whom sea-sickness would be a myth but for the fact that they see its effects on others; but—leaving professional seamen out of the question—these men are the exceptions, not the rule, and the great bulk of humanity, when making a sea voyage in moderately heavy weather, is a very suffering humanity indeed.

As the matter at present stands, sea-sickness is an important obstacle in the way of free intercourse by sea between nation and nation; and this being the case, it becomes the duty of engineering science to remove that obstacle as far as it is possible to do so. Nor have the last few years passed away without something being done—indirectly, it is true—towards this end. We are now building larger and larger vessels, and with increased size has been obtained increased steadiness; but except, perhaps, in the case of the *Great Eastern*, this steadiness has been far from sufficient to materially diminish sea-sickness, while, moreover, very large vessels are by no means applicable everywhere where passenger traffic has to be carried on. Under these circumstances, there is obviously a want of an arrangement by which a certain portion of a vessel can be kept in a state of perfect steadiness, so that people whose stomachs object to the more or less lively movements imparted to a ship by Father Neptune may be carried to their destinations in peace and tranquillity; and it is an arrangement of this kind which has been recently brought forward by Mr. Henry Bessemer which has led us to the present remarks. On shipboard, when any article has to be maintained constantly in either a vertical or horizontal position, the usual plan adopted is to hang this article on gimbals. Thus chronometers, compasses, and barometers are all hung on gimbals; and it was perhaps only natural that when it was desired to keep human beings in a steady position, it should be proposed to hang them on gimbals also. It thus happened that the plan of mounting a cabin so that it might be free to vibrate in every direction, which was worked out some years ago by Mr. Bessemer, and which has been recently brought forward publicly by him, suggested itself to a certain extent to other inventors also, and the records of the Patent Office show at least one patent besides Mr. Bessemer's, in which a cabin on gimbals is recommended as a means of enabling sea-sickness to be avoided. With the exception of Mr. Bessemer, however, the proposers of slung cabins appear to have entirely lost sight of one very important difference which exists between an ordinary mortal and a compass or barometer—a difference which lies in the comparative sensibility to vertical motion. A barometer, so long as it is kept upright, will discharge its functions perfectly, and we presume with ease and comfort to itself, notwithstanding that the point from which it is hung may be rising and falling vertically with the motion of the ship to the extent of perhaps six or eight feet. With a human being, however, the case is different, and all sufferers from sea-sickness well know that the culminating point of their agony is usually reached when the spot on which they stand, after a steady rise, begins to fall away from them with a horrible sinking motion, dreadful for a qualmish individual to even think about.

Now, in order that this objectionable vertical motion may be avoided, it is necessary that the point from which the cabin is hung should be itself free from vertical motion, and this is a matter to which Mr. Bessemer has paid especial attention. In a very long vessel there is a certain point which, even in a rough sea, is practically free from either vertical or lateral motion, and it is this point which Mr. Bessemer has chosen as that from which his cabin should be suspended. Moreover, the selection of this point of suspension serves another important end, besides doing away with the vertical motion, and that is that it destroys the tendency to set up oscillations in the slung chamber. An ordinary pendulum will only hang quietly in a vertical position so long as its centre of suspension remains unmoved. Let this centre be shifted from side to side,

and oscillations will be at once set up. As with a pendulum, so with a slung cabin; and to insure the perfect steadiness of such a cabin, it is necessary that it should be hung from a point practically without motion, a matter to which the proposers of such cabins, with the exception of Mr. Bessemer, appear to have paid no attention.

But in order that a slung cabin may be really of practical service in preventing sea-sickness, it is necessary not merely that it should be steady, but that it should be well ventilated, and that its windows should be so arranged that, while it is well lighted, its occupants may not be able to notice the motion of the vessel which carries them. Besides this, there should be free access to and egress from the cabin in any weather, and it should not be liable to have oscillations set up in it by the movement of the passengers whom it contains. To all these points Mr. Bessemer has paid careful attention, and he has devised means by which all the requirements we have enumerated will be satisfied. In consequence of the foreign patents for many of these improvements not having been yet completed, we must defer describing them in detail. Of the more matured plans, we hope in due course to be able to place an account before our readers; and meantime we may remark that Mr. Bessemer is at present engaged in taking steps to have the whole system thoroughly and practically tested. With this end in view, he is now having constructed by Messrs. Maudslay, Sons & Field a steamer 110 feet long, 17 feet beam, and 10 feet deep, and this vessel is to be fitted with a "steady cabin," 16 feet in diameter and 12 feet in height. This cabin will be constructed on the improved plans to which we have referred, and will be provided with a highly ingenious arrangement by which it will be rendered impossible to set up any oscillation by the movement of people within it, notwithstanding that it is freely hung. The whole, it is expected, will be complete and ready for trial within four months of the present date, so that but a short time will elapse before the capabilities of the system will be fairly put to the proof.

Once let it be shown—as we believe it will be—that a really steady cabin can be provided on shipboard, and a vast field will be opened for the extension of passenger service by sea. Even to those happy individuals who are not affected by sea-sickness a steady cabin would be a comfort by no means to be despised, while to the unfortunate majority who do suffer at sea it would be a real blessing. We intend on a future occasion to speak of the manner in which Mr. Bessemer's plan can be applied to large vessels so as to give a considerable amount of "steady cabin" accommodation, and, meanwhile, in taking leave of the subject for the present, we express a sincere wish—in which we know most of our readers will join—for the success of the experimental vessel now on the stocks.

THE NATIONAL GUARD.

FIFTH INFANTRY.—Matters are progressing quietly in this command, and thus far the company excursions to the summer gardens and parks of this city have somewhat fallen off, but perhaps the projected regimental excursion on the 18th inst. has led to this result. The arrangements for this excursion are hardly perfected, although in the hands of a competent committee. Target practice and a thorough instruction in the firings are the main purposes of the excursion; but as Landmann's Hamilton Park does not afford the facilities of Wimbledon, we hardly expect to see a perfect system carried out. From what we can learn, there will be a change in the practice usually followed; and that is that each company will have its own target erected, and the regimental or first prize, which, we hear, is a silk flag or guidon, will be delivered to the company placing the greatest number of shots in the target according to its numerical strength. This arrangement and the procuring of the prizes are in charge of the field and staff of the regiment, who apparently are somewhat reticent relative to the names and number of prizes. This is perhaps for some wise purpose, and will doubtless be appreciated when the day for the practice occurs. Meanwhile Colonel and Brevet Brigadier-General John E. Bendix, the commandant of the Fifth, has directed the regiment to parade for target practice at Landmann's Hamilton Park, in full uniform (white trousers), on Thursday, the 18th inst. Line will be formed in Hester street, opposite the armory, at 8 o'clock A. M. Field and staff (dismounted) will report to the commandant, and the non-commissioned staff, band, and drum corps to the adjutant, at the armory, at 7 o'clock A. M. precisely. Company quartermaster-sergeants will report to the regimental quartermaster at 7 o'clock A. M. for ammunition for their respective companies. As a part of the summer uniform of the officers and members of this regiment, the Board of Officers has adopted white trousers, which the members will provide themselves with for this parade. No member will be allowed to contend for any prize who is not uniformed in accordance with this order. This being the first parade of this regiment for target practice, and as the instruction to be given in loading and firing will be of great service to the regiment, the commandant expresses the hope that each and every member will be present.

THE MILITIA OF THE STATE OF LOUISIANA.—We have received from Colonel and Brevet Brigadier-General W. S. Mudgett, U. S. Volunteers, Adjutant-General First division Louisiana State Militia, a pamphlet of some 40 pages, containing articles for the government of the Militia of that State. It is a concise compilation from the latest standard authorities, and contains many excellent suggestions, which, as the preface states, "are not intended to have the binding effect of regulations," though "it is believed that they

are in conformity with the recognized customs of the Regular service, and that their observance by the Militia will insure that uniformity of detail so necessary to a thorough and efficient organization." The Militia of Louisiana is divided into three divisions, and is composed of two classes, volunteer and enrolled, the former being such as are accepted by the Governor and Commander-in-Chief under certain provisions of the Militia laws of 1870. The term of service of these volunteers is *two years unless sooner discharged*. Think of that, members of the National Guard State of New York, who have to serve *seven years* faithfully before claiming a discharge! Yet the latter term, we think, gives better satisfaction in the end, especially in many of the divisions of this State. There are many advocates of short terms of enlistment, and many of the States have adopted them for the purpose of keeping up the standard of the Militia, but only in a few instances has the system worked well. Why is this? It seems natural that men should enlist more rapidly under short terms, and in fact do; but our experience is that these men rarely make good soldiers, and very few ever serve over one term, having apparently lost by that time all interest or love for the service. In the instance of New York State, where the term of service, as above stated, is seven years, men enlist with a full knowledge of the duties required of them, and in most cases, as time progresses, gradually acquire a love for the service which is hard to overcome; indeed, with many it becomes a second nature, without whose associations and excitements they could scarcely exist. No good soldiers ever object to the length of the service, and the officers of our best organizations are and have always been in its favor. It works well in the First and other divisions of our State, and should also in Louisiana and other States of the Union. The handbook we refer to contains nothing of special interest, or new to our readers, being a carefully arranged outline of the duties required in the service on the part of officers and men, forms, regulations, and customs of the service, all of which are contained in the Tactics and General Regulations. The compilation is the conjoint work of Brevet Brigadier-General W. S. Mudgett, Adjutant-General, and Colonel E. W. Mason, Inspector-General of the First division Louisiana Militia. Among the concluding sections of the laws and customs of the service we extract the following as worthy of perusal by many of the members of the National Guard in our State:

It is earnestly enjoined upon the members of the Militia of the State to keep up in their unofficial intercourse with each other the same scrupulous courtesies that would be required of them in active service. In this manner they can show to other citizens, not volunteers, that military discipline, so far from being the forced obedience to arbitrary and perhaps unjust rules, is the highest form of courteous conduct between gentlemen holding apparently dissimilar positions.

Officers drilling recruits should be careful that the first part of the school of the soldier be not neglected or hurried over. The men should be thoroughly practised in the preliminary "setting up" prescribed in the Tactics before they are allowed to pass to the manual of arms. It is only by careful and constant practice of these elementary exercises that soldierly bearing is acquired and maintained. When the men have been brought to stand at attention, with heads to the front, without turning their heads or eyes toward every passing object, they will have acquired the most important lesson in the school of the soldier.

Officers will establish guides or markers without pulling or pushing them, by indicating with the sword the position to be occupied. Slight changes should be made by verbal order. In aligning companies this rule should be also observed.

All officers should be cautious in reproving non-commissioned officers in the presence or hearing of privates, lest their authority should be weakened.

Masonic or society badges or pins should never be worn upon the uniform. The only decorations authorized to be worn are corps badges for those who served in the Army during the Rebellion.

File closers should be active in their duties, and not fall into the common error of considering their position purely ornamental. They should keep the files closed to proper distances, and correct any errors observed in the step, the alignment, the touch of elbows, the changes of arms, or the carriage of the men. They should particularly endeavor to preserve silence in the ranks.

Finally, everything that is worth doing at all, is worth doing well. This is especially applicable to military duty.

TWELFTH INFANTRY.—On Wednesday of last week Company E of this command—better known by the designation of the Webster Light Guard—carried out in good style and with excellent management an excursion by water to Excelsior Park, located on the Hudson almost opposite Yonkers, and within the precincts of Nyack, N. Y. The steamer *Martha Washington* and barge *W. H. Morton* were chartered for the conveyance of the excursionists, these vessels offering ample accommodations. As usual on these occasions, military promptness in the time of leaving the wharf was not a feature of the excursion, but we cannot blame the managers for following the customary disregard of punctuality. At Christopher street comparatively few of the party came on board; but when, at a little before 10 A. M., the boat touched Thirty-fourth street wharf, a goodly crowd embarked. They had patiently awaited the arrival of the boats, and eagerly stepped aboard them. Finally all were embarked. The band played inspiringly, the bawlers were freed, and the steamer, well laden, began its pleasant progress toward its destination. Soon nimble feet were active in the dance, and merry voices were raised in friendly greeting. A favorable tide hastened the progress of the vessel, so that at about noon the wharf of the park was reached. The day up to this time had been very favorable, but as the steamer approached the grounds a sudden shower came upon the party, which at first

checked enthusiasm, but the shower was of short duration. The boats were therefore soon lightened of their freight, and the grounds speedily enlivened by little groups of picnickers, fair hands having hastily spread the contents of heavily laden baskets on the tables provided. But while these thoughtful folks were enjoying their luncheon on the bill, a hapless party were at its foot, where the so-called hotel was located, awaiting the dinner promised in an hour's time, and which at last appeared to provoke, but not to satisfy appetite. The time was pleasantly spent at the park in dancing, strolling, target practice with air-guns, and such other amusement as the grounds afforded. The Excelsior Park is very pleasantly located on the river, and commands a fine view of the Hudson and its opposite shore. It is, however, not so accessible as the groves and parks on the east side of the river. At 5 o'clock the steamer blew its whistle for the return of the excursionists, and soon the hillside was alive with merry parties seeking the boats, which were rapidly filled for the passage home. The return was similar to the journey to the grounds, dancing, as a matter of course, being the main pastime. Later in the afternoon a few officers and guests gathered in the limited space of the committee room, and there, amid the constant popping of California's vintage, listened to the speeches, songs, and recitations of Colonel Ward, Adjutant Murphy, Captains Byrne and McAfee, Lieutenants Burns, Kochling, and others. An hour or so was here pleasantly spent. The boats made slow progress on their return, so that it was almost 9 o'clock before the last landing was reached. The excursion was pleasant and unmarred throughout, quiet and social in its character, and reflecting the greatest credit on the committee of arrangements, Messrs. McKelvey, Stivers, Seely, Ffrench, Gourly, and the company as a whole. This company, strange to say, is without officers, Lieutenant Burns being detailed to command it. Still, for all this, its discipline is so perfect that it is almost able to "go it alone." In addition to the names already mentioned, there were present Colonel Sprague, ex-Lieutenant-Colonel McAfee, Captain Rich, Quartermaster Riker, Sergeant-Major Kirby, and many others whom space allows us no room to mention. Uniforms were rather the exception than the rule—an excellent plan on the part of the company.

ELEVENTH INFANTRY.—It is unfortunate that this excellent command should at this time lose not only its efficient commandant but also its major, both of whom have long been connected with the regiment. Colonel Lux is one of the veterans of the National Guard, with a service of about thirty years, and, so far as the Eleventh is concerned, he has left nothing undone to promote its welfare. It is therefore natural that the regiment should endeavor to induce him to remain with them; but their efforts have been entirely unavailing. Colonel Lux in refusing to reconsider his action cannot be regarded as unwise. He is now at the zenith of his reputation as an officer—a time appropriate for his resignation. If an officer ever feels inclined to resign, just such a time as this is the one he is likely to choose. The entire command mourn his loss, and the respect of every member has been secured.

At a regular meeting of the Board of Officers of this regiment held July 24, the following preamble and resolutions were unanimously adopted:

Whereas, The Eleventh regiment N. Y. S. N. G. during its recent visit to the city of Albany was received and most hospitably entertained by the Twenty-fifth regiment N. Y. S. N. G., and was the recipient of many acts of kindness and attention from the officers and members of the said Twenty-fifth regiment; now be it

Resolved, That this board, for themselves and in behalf of the Eleventh regiment, do hereby tender to Colonel Frederick Andes, the officers and members of the Twenty-fifth regiment N. Y. S. N. G., their most hearty thanks for the cordial reception and generous entertainment extended to the Eleventh regiment during its visit to Albany, and that it will be a source of pride and gratification to the officers and members of the said Eleventh regiment to have an early opportunity of receiving the Twenty-fifth regiment in this city and extending to them a like soldierly and friendly greeting.

Resolved, That a copy of the foregoing preamble and resolutions be suitably engrossed and presented to the Twenty-fifth regiment N. Y. S. N. G., and the foregoing proceedings be printed and published in the following papers: *New York Staats Zeitung*, *ARMY AND NAVY JOURNAL*, *Sunday Mercury*, and the *Albany Argus*.

TWENTY-SECOND INFANTRY.—On Tuesday last a battalion of this regiment, composed of Companies A and B, made an excursion to Long Branch. The battalion, under command of the senior officer, Captain Cullen, paraded some eighty muskets, and, including band, drum corps, and invited guests, the excursion party numbered some hundred and fifty. The armory was left at a few minutes before 9 o'clock, and the battalion, headed by its band and drum corps, under Drum-Major Strube, marched down Broadway to Murray street, at the foot of which it embarked on board the regular steamer *Jesse Hoyt*, of the Long Branch line. The embarkation was necessarily rapid, the battalion having reached the boat at the bell's last tolling; and as it was, one tardy member, to his great chagrin, was left behind. The steamer had its full complement of passengers, and was almost uncomfortably crowded; nevertheless, as the day was delightful, the trip to Sandy Hook was very far from disagreeable. At this point the excursionists took the cars for Long Branch, where they arrived shortly before noon, and proceeded directly to the Continental Hotel, stacked arms on the lawn in its front, and then partook of a luncheon prepared in the dining-room of the hotel. After this limited and hasty repast, the mem-

bers marched in open order without muskets by a so-called short route to the cars, and proceeded to Monmouth Park race course, having been especially invited by Mr. Chamberlain, its proprietor, to attend and witness the races. Here, in conjunction with the famous Americus Club, who were also present, the members of the companies spent a happy time. The course is a fine one, the attendance was large, and the several races well contested and exciting. At the termination of the races the battalion, after much marching and countermarching—the object of which we could not ascertain—started for the cars for Long Branch, where it arrived about 5 o'clock. A hearty and substantial dinner was here eaten; shortly after which the battalion held a dress parade on the lawn, the most showy if not the most essential portion of the parade being entirely omitted; still it passed off very satisfactorily. It was announced that General Grant would review the battalion; but despite the efforts of Captain Styles, of Company A, who called on him, the President's attendance could not be secured. At the termination of the dress parade, after giving three cheers for Mr. Borrows, the proprietor of the Continental, and likewise three for the ladies, the battalion started for home via cars and steamer *Plymouth Rock*, reaching the city at 9:30. The members of the battalion throughout conducted themselves with the utmost decorum, and were the recipients of many flattering testimonials. The officers of the battalion were as follows: Company A—Captain Styles, Lieutenants Cunningham and S. E. Briggs; Company B—Captain Cullen, Lieutenants Colfax and Pearsall. Lieutenant Comisky, of Company G, acted as the adjutant of the battalion, and, if we may except a few errors of commission and omission, which probably occurred from the novelty of the position, did remarkably well. Among the guests who participated in the pleasures of the excursionists were ex-Colonel Remmey, Lieutenant-Colonel Camp, Major Brown, Captain Beeson, Assistant Surgeon Roberts, Mr. Bent of Rye notoriety, and a number of others, not omitting ex-Quartermaster Rogers, of the Americus Club. The battalion was received on its arrival by Company C, Captain Tate commanding, whose strength was augmented by volunteers from other companies to the number of sixty-five muskets. The appearance of the battalion was very fine, and won great applause during the march to the armory.

"AN OFFICER OF MILITIA" sends us the following inquiries, which we publish in full with comments: "The battalion being in column of fours, on the march right in front, guide left, by what commands can it be formed, without halting, into column by company at full distance; and upon what page of the Tactics can the movement be found? Is not the common command now used by the commanding officer of the battalion—viz: 1. By companies left (or right) front into line; 2. March—incorrect? And is there any authority for it? Can the column be formed into column at full distance, while on the march, from a column of fours, right in front, by any other commands than the following from the commanding officer: 1. By the right of companies to the rear; 2. Fours right; 3. March; 4. Fours left; 5. March; 6. Forward; 7. March?"

Answer.—There is, by inference, some authority for the method as now practised, but none whatever for the movement suggested by you. In paragraph 1021 and following, you will notice that the colonel gives the command: 1. By the right of companies to the rear into column; 2. Fours right; 3. March. This command breaks the line; that done, the captains' commands complete the movement. You will notice furthermore, that breaking to the rear by the right (or left) of companies (or divisions) can only be executed from line, and never from column of fours.

A movement similar to the one suggested by you is provided for in paragraph 1361, the commands for which are: 1. By company (or division); 2. Column right (or left); 3. March. From this position the colonel could bring the battalion into column by company, by the commands: 1. Fours left (or right); 2. March; 3. Guide left (or right), if he chose to do so; but there is no authority for it.

There is really no authority for bringing a battalion, on the march, from column of fours to column by company, to the front; but after carefully studying paragraphs 556 and following, and paragraphs 1357, 1358, and 1361, we infer that such a movement was intended by General Upton. Certainly such a movement is far preferable to the one suggested, because to wheel by fours and march to the right (or left) the distance of the depth of a company, and wheel by fours a second time, involves a loss of time sufficient to block the march of the succeeding battalions, while by the method now in general use there is no loss of time. Another objection would be the impossibility of having the command heard and perfectly understood in time to have its execution simultaneous; let one subdivision be a few seconds late, and loss of distance would be the result.

We would call your attention to the seven commands at the end of your query. Give these commands to a well instructed battalion marching along a street, and when you have finished you will find your battalion marching in column of fours, right (now become left) in front. No attention would be paid to the first command, because the officers of such a battalion would understand their business too well; at the third, line would be formed to the rear, file-closers passing through; at the fifth, column of fours would be formed; at the sixth, the march would be taken up, the

direction being the same as at the commencement of the movement; the seventh command is superfluous.

SIXTH INFANTRY.—Company F re-elected its old captain, Samuel Blum, on Monday evening. Captain Blum has been one of the best officers of the regiment, and only resigned to give his company a chance to change its commander, as his term of service had expired several years since. He has accepted, much to the gratification of the members of the company. The target excursion and summer night's festival of Company H will take place on Tuesday, the 9th inst., at the East River Park. The company will leave the armory at 8:30 A. M., and take the Harlem boat at the foot of Eleventh street, East River, at 9:15. The members of the company will wear, for the first time, the white cross belts and epaulets which have been adopted by the regiment. Captain Max Zenn is commandant of the company.

BATTERY K, FIRST DIVISION.—This fine organization on Wednesday last made its third annual excursion at Reentz's Elm Park, Ninety-second street near Eighth avenue, which was one of the most successful affairs ever held by the battery, which paraded 92 men and 6 pieces, making a very handsome display. The day was pleasantly spent in social intercourse, dancing being the chief pastime. Two fine bands were in attendance, one of which furnished music for dancing and the other for promenade purposes. The attendance was excessively large, almost every organization in the division being represented. There were many guests present; among the most prominent were Major-General Shaler and a portion of his staff; Colonel Lux and Lieutenant-Colonel Unbekant, Eleventh Infantry; Majors Fleischel, First Cavalry, and Sauer, Third Cavalry; Captain Keim, Battery B, First Division. The officers of the battery are Captain Heubner, Lieutenants Vix and Fuchs, all of whom deserve great credit for completeness of the organization and its general efficiency.

VARIOUS ITEMS.

The veterans of Company E, Seventh Infantry, have invited the active members of the company to participate with them in an excursion to Round Island, Long Island Sound, on Wednesday next. A large parade and good time are expected. Captain Wm. A. Speaight is in command of the veterans, James Macgregor is first lieutenant, and the organization now numbers about ninety members. A committee of Company E will formally present to the Manhattan Club, Tottenville, S. I., on the 15th instant, a set of resolutions, handsomely framed, acknowledging courtesies extended on the occasion of the company's excursion last summer. We learn unofficially that the Ninth Infantry will proceed to Long Branch on the 10th instant, for one week's encampment. If this report is true, the matter has been arranged very quietly, as the adjutant on Tuesday last either knew nothing of it or was unwilling to divulge the great secret. A little more efficiency at the headquarters of this regiment is absolutely necessary. Captain George W. Smith of the Eighth company, Seventh regiment, one of the most gentlemanly and respected officers of the regiment, wore his first veteran medal on the occasion of the regimental excursion to Philadelphia and Cape May, it having been presented to him by the members of the company, through Lieutenant Casey, just prior to leaving the armory. Captain Smith, we learn, has been thirty-five years a member of the regiment, and his fine soldierly bearing at the right of the regiment always attracts attention. The resemblance between this officer and General Meade is very remarkable, and was much commented upon at Cape May. Company G, Eighth Infantry, Captain Leslie, made an excursion for target practice, etc., to Karl's Park, Morrisiana. The company looked well as it passed our office, and paraded about thirty muskets. Messrs. Gurney & Son have completed seven photographs taken of the members of the Seventh at Cape May. The groups are as perfect as can be expected of sun pictures of this character and taken under such adverse circumstances. The photographs are all great improvements on those of last year, and Mr. Benjamin Gurney has displayed great taste in the arrangement of the various groups. A certain worthy alderman, captain of a militia company, was ordering his company to fall back, in order to dress with the line, and gave the command, "Advance three paces backward! March!" We learn that Company E of the Twelfth Infantry is making overtures to a prominent military instructor with a view of securing his services as commandant. It is announced that Colonel Austin, the capable commandant of the Forty-seventh Infantry, has tendered his resignation. What has become of the Twenty-third Infantry? We hear nothing of its movements. Is it because the adjutant has recently been elected major? The Twenty-third endeavors to imitate the Seventh in its general esprit de corps, but in giving information to the press it falls considerably behind it. In answer to our correspondent "N. G. Non-Com." we would state that: I. In the absence of officers the ranking sergeant commands the company, say at dress parade or other occasions. II. He is warranted in laying aside his piece and "carrying" his sword. III. and IV. are answered above. V. At the signal from the adjutant, "Parade is dismissed," he should close on the centre with the officers and march to the front with them. Adjutant Francis, Seventy-first Infantry, has compiled a book of the character you describe. His address is 30 Broad street. We would state that such instances as our correspondent mentions seldom if ever occur, as there are invariably more than ten company officers present on these occasions. We would

advise correspondents generally to examine the Tactics before propounding inquiries.

CHANGES IN THE NATIONAL GUARD.

GENERAL HEADQUARTERS STATE OF NEW YORK, }
ADJUTANT-GENERAL'S OFFICE, ALBANY, Aug. 1, 1870. }
The following-named officers have been commissioned by the Commander-in-Chief in the N. G. S. N. Y. during the month of July, 1870:

FIFTH DIVISION.

Colonel John Derrenbacher, chief of artillery, with rank from July 26, original vacancy.
Lieutenant-Colonel H. Dwight Ladin, ordnance officer, with rank from July 26, vice J. Derrenbacher, promoted.

SEVENTH DIVISION.

Colonel Gilbert H. Reynolds, chief of artillery, with rank from July 1, original vacancy.
Colonel Henry C. Frost, engineer, with rank from July 1, vice G. H. Reynolds, promoted.
Major Simon Stettheimer, aide-de-camp, with rank from July 1, vice H. C. Frost, promoted.

SECOND BRIGADE.

Captain Charles M. Schieffelin, aide-de camp, with rank from June 21, vice Wm. C. Dickel, promoted.

FIFTH BRIGADE.

Captain William H. Langley, aide-de-camp, with rank from June 15, vice John L. Burlingame, resigned.

TENTH BRIGADE.

Major George H. Otis, inspector, with rank from July 19, vice C. F. Moore, resigned.

THIRTY-FIRST BRIGADE.

Lewis P. Dayton, surgeon, with rank from June 1, vice Jesse I. Richards, resigned.

BATTALION OF CAVALRY, TWENTY-FOURTH BRIGADE.

David P. Fairchild, second lieutenant, with rank from July 8, original vacancy.
Edward C. Fay, captain, with rank from May 14, vice E. C. Fay, removed from district.
Edward W. Longstreet, quartermaster, with rank from June 27, vice Edward Helts, removed from district.

BATTALION OF ARTILLERY, TWENTY-FOURTH BRIGADE.

Paul Birchmeyer, captain, with rank from June 21, vice William Demong, resigned.
Frederick Milch, second lieutenant, with rank from June 7, vice Conrad Ring, resigned.

BATTALION OF ARTILLERY, TWENTY-FIFTH BRIGADE.

Michael R. Quinn, major, with rank from July 14, vice Wm. M. Lewis, absent without leave.

BATTERY K, FIRST DIVISION.

Joseph Henry, first lieutenant, with rank from June 24, original vacancy.
Philip E. Haag, second lieutenant, with rank from June 24, vice Jacob Vix, resigned.

FIRST REGIMENT OF INFANTRY.

Frank M. Clark, adjutant, with rank from July 12, vice M. B. Spaulding, removed from district.

THIRD REGIMENT OF INFANTRY.

John G. Fay, colonel, with rank from July 12, original vacancy.
John Davis Hatch, lieutenant-colonel, with rank from July 12, original vacancy.
Benjamin F. Wallace, major, with rank from July 12, original vacancy.
William McFarland, first lieutenant, with rank from July 12, original vacancy.
Samuel S. Smith, second lieutenant, with rank from July 12, original vacancy.
John J. Sauran, captain, with rank from June 14, original vacancy.
John Eisele, first lieutenant, with rank from June 14, original vacancy.
Jasper Pryor, first lieutenant, with rank from June 14, original vacancy.
Stephen Pell Hunt, second lieutenant, with rank from June 14, original vacancy.
James B. Spicer, captain, with rank from June 14, original vacancy.
John H. Stubbings, first lieutenant, with rank from June 14, original vacancy.
William C. Broughton, second lieutenant, with rank from June 14, original vacancy.
Edward Carroll, captain, with rank from June 14, original vacancy.
Thomas O'Reilly, first lieutenant, with rank from June 14, original vacancy.
Michael C. Brennan, second lieutenant, with rank from June 14, original vacancy.
Bernard Hufnagel, captain, with rank from June 14, original vacancy.
Christopher Miller, first lieutenant, with rank from June 14, original vacancy.

CAPTAIN Simon Snyder, Fifth U. S. Infantry, was, July 30, ordered to at once assume command of Fort Leavenworth arsenal, which arsenal has been for the time being attached to the post of Fort Leavenworth. The garrison of the arsenal will be composed of the present ordnance detachment and twenty-five men of company F, Fifth U. S. Infantry.

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JOHNSON—LINDSEY.—At Talcahuano, Chili, on Wednesday, the 5th of June, 1870, Commander PHILIP C. JOHNSON, U. S. Navy, Chief of Staff Pacific fleet, and commanding U. S. flag-ship Saratoga, to Miss ELVIRA LINDSEY, of Talcahuano, Chili.

DIED.

BARNARD.—At Baton Rouge Barracks, La., Thursday, the 21st ult., at half past ten P. M. Brevet Lieutenant-Colonel ROBERT M. BARNARD, Captain Nineteenth U. S. Infantry.

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ARMY BUILDING,
COR. OF HORTON AND GREENE STREETS,
NEW YORK CITY, N. Y., July 27, 1870.
PROPOSALS (in duplicate) will be received by the undersigned until 12 o'clock M., SATURDAY, August 27, 1870, for the following Subistence Stores:
300 barrels of "Prime Mess" Pork, 1 iron hoop on each end.
1,000 pounds of Leaf Lard, in 5 pound caddies, 12 caddies in a case.
2,000 pounds of Extra Sugar-Cured Ham, packed in tierces, full head lined.
1,000 pounds of Breakfast Bacon, packed in 100 pound boxes.
500 barrels of Family Flour, full head lined and sealed bungs.
100 barrels of Extra Family Flour, full head lined and sealed bungs.
5,000 pounds of prime medium Beans, in barrels, full head lined.
5,000 pounds of Carolina Rice, in oak barrels, full head lined.
10,000 pounds Green Rio Coffee, in oak barrels, full head lined.
5,000 pounds Green Java Coffee, in original mats, packed three in a gunny.
10,000 pounds Brown Sugar, in barrels, full head lined.
3,000 pounds Granulated Sugar, in barrels, full head lined.
3,000 pounds Crushed Sugar, in barrels, full head lined.
3,000 pounds Cut Leaf Sugar, in barrels, full head lined.
10,000 pounds Brown Soap, "Family," in 50-pound boxes, 2-pound bars, strapped.
10,000 pounds Fine Salt, in barrels, full head lined.
4,000 pounds Adamantine Candles, full weights, 6's, in 40-pound boxes.
1,000 pounds Pure Ground Pepper, 4-pound packages, in 25 pound boxes.
5,000 gallons Pure Cider Vinegar, in iron-bound barrels.
The manner of making bids, requirements of bidders, etc., the same as previous advertisements from this office. The quantities to be more or less, at the option of the department.
By order of WM. W. BURNS,
Brevet Brigadier-General U. S. A., Chief Commissary Subistence Department of the East.

NOTICE RELATING TO ARTIFICIAL LIMBS.

WAR DEPARTMENT,
SURGEON-GENERAL'S OFFICE,
WASHINGTON, July 15, 1870.

CONGRESS having provided by Acts approved June 17, June 30, and July 11, 1870, for the re-issue every five years of Artificial Limbs, or the value thereof in money, to officers, soldiers, seamen and marines, who have lost limbs in the service of the United States, the following instructions are published for the benefit of those interested.

Applications should be made direct to the Surgeon-General, from whose office the necessary blanks will be furnished on request.

Upon applications for limbs in kind, orders will be given by the Surgeon-General, upon any manufacturer selected, who shall first have filed a bond in the sum of Five Thousand Dollars, with two sureties, to furnish good and satisfactory limbs, without extra charge to the soldier, and make good all defects of material or workmanship without additional charge, subject in all cases to the inspection of such persons as the Surgeon-General may designate.

Blank forms of bonds will be furnished by this Office.

Transportation to and from the place of fitting the limb will also be furnished upon a written request addressed to the Surgeon-General.

Applications for commutation will be certified by the Surgeon-General, and transmitted to the Commissioner of Pensions for payment, through the local pension agents.

As full instructions will be forwarded from this Office with the blank form of application, the expense of employing an attorney or agent will be in no case necessary.

J. K. BARNES,
Surgeon-General, U. S. A.

PROPOSALS.

DEPOT QUARTERMASTER'S OFFICE,
JEFFERSONVILLE, IND., July 15, 1870.

SEALED PROPOSALS, in duplicate, will be received at this office until 12 M., the 30th day of August 1870, for the manufacture of two thousand (2,000) Common Tents, and one thousand (1,000) Wall Tents and Flies, more or less, without poles or pins, from material (except sewing twine) to be furnished by the United States and delivered to the contractor at the Depot of Jeffersonville, Ind. The Tents when completed will be delivered at the same place for inspection.

The right to reject any or all bids, if regarded as disadvantageous, is reserved by the Government. Bidders are invited to be present at the opening. Proposals must be addressed to the undersigned, and distinctly endorsed "Proposals for the Manufacture of Tents."

For specifications, conditions, and further information, apply at either of the Quartermaster's offices at Chicago, Ill.; St. Louis, Mo.; New York; Philadelphia, Pa.; Louisville, Ky.; Jeffersonville, Ind.; or Washington, D. C.

By order of the Quartermaster-General,
C. H. HOYT,
Captain and Assistant Quartermaster U. S. A.
Depot Quartermaster.

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I manufacture pipes of all designs to order. Repairing, Belling, Ambers, etc., attended to and satisfaction guaranteed. Address for Circulars to P. O. BOX 6724, NEW YORK, or call at
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N. B. Tobacco of all brands are constantly kept on hand, and at market prices. All orders are attended to by myself personally.

WEST POINT, N. Y., June 16, 1870.

Mr F. J. KALDENBERG, DEAR SIR: We take pleasure in announcing our entire satisfaction in the magnificent pipe you have just manufactured for our class. Every one that has seen it so far declares it the most splendid piece of workmanship he has ever seen. From the liberal, conscientious manner in which you have executed it, we cordially recommend you to all the smokers in the Army and Navy, as well as to the lovers of the weed generally. THE MEMBERS OF THE CLASS OF '70, U. S. M. A.

TO THE ARMY AND NAVY.



In reply to the many inquiries made daily in regard to Meer-
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which hold the most of Tobacco, and as the most durable and practical
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Being represented extensively in the Army and Navy by our goods, and the members thereof
being mostly smokers, we are desirous to have our Pipes, which are considered equalled by none, more
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We will sell a No. 3 Pipe for \$5, and charge \$1 additional for every number
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to 8 are considered fair-sized ones; from No. 9 upward, large ones.

In the price is included a case and a Weichsel stem.

Good Amber Mouthpieces for Weichsel Stems we will sell from \$1 to \$2 50 a
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